STUDIES IN
INVALID OCCUPATION

Marian Mitchell Abbot.

592 Pleasant Street
Belmont. Mass.

December 1910.

For Lt. Mooney — (The master-
mason of brick
without straw

U.S. General Hospital No. 26 —
Fort Des Moines.

December - 1918. See Chap. XV.

A GROUP OF COLONIAL CLOTHESPINS

To the left, John Alden and Priscilla, to the right, George and Martha Washington. Up through the center rides Paul Revere, while the friendly Indians are seen in the rear. All are made from clothespins dressed in paper. *Page 45*

STUDIES IN INVALID OCCUPATION

A Manual for Nurses and Attendants

BY
SUSAN E. TRACY

WHITCOMB & BARROWS
BOSTON 1910

Copyright 1910 by
Susan E. Tracy

THOMAS TODD CO.
PRINTERS
14 Beacon Street, Boston, Mass.

DEDICATED

TO

WILLIAM MAXWELL HOUGHTON

IN LOVING RECOGNITION OF
GREAT LESSONS TAUGHT
BY A LITTLE CHILD

FOREWORD

These studies were brought into systematized form and first tested by practical application in the classes of the Training School for Nurses of the Adams Nervine Asylum, Jamaica Plain, Massachusetts, with the interest and unfailing sympathy of its superintendent, Dr. Daniel H. Fuller, who courteously writes the introduction to this book.

The closing chapter relating to the work for the insane is supplied in great kindness by Dr. E. Stanley Abbot, of McLean Hospital, Waverley, Massachusetts.

For the assistance of these two earnest supporters of all helpful methods I wish to express my sincere thanks.

Susan E. Tracy.

Boston, September 10, 1910.

CONTENTS

CHAPTER		PAGE
	INTRODUCTION	1
	The Need of Instruction for Nurses in Occupations for the Sick	
I.	METHODS OF TEACHING	11
II.	THE TEACHER	16
III.	NECESSARY EQUIPMENT	20
	TYPICAL INVALIDS	
IV.	THE CHILD OF POVERTY AND THE CHILD OF WEALTH . .	22
V.	RESTRICTED POSITIONS	47
VI.	IN QUARANTINE	58
VII.	ONE-HAND LESSONS	67
VIII.	THE IMPATIENT BOY	76
IX.	IN THE HOSPITAL	81
X.	GRANDMOTHER	95
XI.	THE BUSINESS MAN	109
XII.	WITH WANING POWERS	124
XIII.	IN WAITING TIME	132
XIV.	WITHOUT SIGHT	138
XV.	THE CLOUDED MIND	151
	CONCLUSION	170
	LIST OF OCCUPATIONS	173

ILLUSTRATIONS

	FACING PAGE
A Group of Colonial Clothespins	Frontispiece
Paper–Box House	24
Furniture from Paper Boxes	44
Cloth Animals	50
Cut–Out Picture Work	58
Bed–Desk	68
Reed, Raffia and Pine–Needle Baskets	80
Practical Suggestions for an Old Lady's Work	100
Examples of Bookbinding without Tools	112
Miniature Fowls	122
Rake Knitting. An Acadian Basket	128
Eggshell Toys	132

Full-page photographs by Frank A. Rugg.

INTRODUCTION

The Need of Instruction for Nurses in Occupations for the Sick

By Daniel H. Fuller, M.D.

There is a growing tendency on the part of many physicians to depart from the custom of the past generation by prescribing fewer drugs and these more rationally. Other means of treatment are widely employed, not all new, to be sure, but exploited with renewed emphasis, and practically new to those who have been educated to other methods or who have heretofore given little thought to such matters. Among these important adjuncts to drug treatment, and in many cases substitutes for it, may be mentioned massage, electricity, gymnastics, dietary *régimes*, hydrotherapy, the use of light, heat and fresh air in various ways, occupations, instructions in methods of self-help and multitudes of ways of using suggestion or psychotherapy.

Each one of these methods of treatment has been vaunted from time to time by successful enthusiasts as a panacea for so-called functional diseases, and not infrequently for organic troubles also. Enthusiastic confidence in a method of treatment always brings a measure of success, somewhat in proportion to the enthusiasm, and every physician can recall occasions where his method was entirely subordinate to his enthusiastic maintenance of confidence in the method being used.

It is the belief of the writer of this chapter that suitable occupation is a valuable agent in the treatment of the sick. It has its place, not as a panacea, but as an important adjunct to other forms of treatment, and sometimes it is quite all the treatment necessary. It has been used too exclusively by the specialist, and too little by the general practitioner, although

there is much clever use of it by resourceful doctors and nurses which is never widely published.

Occupation for the sick is not employed so much as it might be profitably, partly because of ignorance of the great good that may be accomplished thereby and partly because of the difficulties which appear to stand in the way of its satisfactory use. The busy doctor and the busy nurse may feel that they have not time to initiate any *régime* of this kind even if the usefulness of it is apparent. More frequently perhaps, through lack of experience or ingenuity, an occupation cannot be provided, much less maintained by either the physician or nurse.

The psychology of work is a subject of importance and interest, but it is not necessary for the physician to be a psychologist to prescribe work wisely for the patient whose physical, nervous, mental and moral characteristics he has made the object of keen observation and study.

It must not be inferred from the above that occupation can be used successfully in a haphazard manner. Not only must the nervous and physical strength be carefully estimated, but the temperament, natural tastes and disposition have to be taken into account in the kind and amount of occupation suggested, as well as in the manner and place in which it is presented. Different physicians will have different theories as to the psychic processes involved. Immediate or more remote results may be aimed at, and the precise conditions to be treated may be of a subtle nature.

The elimination from the patient's mind of the idea of "prescription" or "remedy" in connection with the occupation is doubtless often much to be desired. When the work is followed for its own sake, wholesome interests are substituted for morbid ones and gradually the attention is shifted to and absorbed by the new lines of thought aroused, so that, instead of being a medicine that can be dropped when the patient is cured, it has become rather a part of the restored individual's life, to be retained in some form so long as health exists.

Then, too, the use of occupation in a sanitarium or hospital is quite a different matter from its use in the home or away from the association with sickness and treatment.

The conditions in a well organized and wisely administered sanitarium furnish many invaluable advantages and possibilities for the treatment of the sick, so that it is difficult to see how such institutions could be dispensed with. Nevertheless it is and doubtless always will be true that the association of invalids together will be attended with undesirable reactions to their environment on the part of some. Occasionally absolute harm may result, necessitating the removal of the patient. In a hospital or sanitarium for nervous invalids there are usually a number of patients who really need treatment other than occupation. Hence it becomes a necessity to combine occupation, as there offered, with other remedial treatment. On the other hand the remedial element in the idea of work becomes a compelling argument with others to whom it appeals and whose confidence in the physician leads to the eager grasping of any suggestion which presents the possibility of a restoration to health. But even in such cases the remedial effect is most completely attained when the occupation is followed from a gradually acquired ability and interest, and no longer simply because it is prescribed. Such a result means a cure in the broadest sense, in that the mental attitude toward life has been changed. Wholesome interests have been aroused, and a conscious poise and control in the use of one's strength in the accomplishment of work has made work a pleasure and life satisfying.

There is danger also, in the sanitarium, of permitting the occupations furnished to fall into the category of other methods of routine treatment, so that many who can hardly expect to be benefited thereby will beg to be allowed to dabble in them, sometimes from curiosity and sometimes with that peculiar desire, which some dwellers in sanitaria have, to try everything the place affords, more for the sake of adding another to the ever increasing number of treatments which they have taken than for any

desire or expectancy of being benefited. Again, the value of occupation may be discredited by some who feel that unfair discrimination is made if they are denied what their neighbors have, while yet others, with better intent, are prone to rush feverishly into any occupation offered, in their earnest and genuine determination to leave nothing untried in the search for health. Unless such misuse of occupations is carefully guarded against, its wholesome influence is greatly diminished.

But in spite of the possibilities of ill effects from the association of nervous invalids, and of the dangers of misuse of the occupation room, there are many advantages to those who gather there from day to day with an earnest purpose and a growing interest. The occupation room offers a new environment. It takes the patient away from his individual apartment and from the living rooms of the institution which may be filled with the suggestion of invalidism. It presents a cheerful atmosphere of quiet activity and a satisfying sense of something worth while being accomplished, which is stimulating to interest and effort. All talk of sickness, invalidism, treatment, past experiences and symptoms should be rigidly excluded, and here is one place where this can be accomplished effectually by a tactful and watchful teacher. This is most important. The working together with others under these conditions often proves an inspiration. The example of one who is interested and happy in his work is a strong and natural incentive to the discouraged and fearful one. The willing and kindly effort to assist another who finds the tasks perplexing and discouraging is sometimes wonderfully helpful to both. Again, for many nervous invalids who have gradually shut themselves away from all association with others and whose self-seclusion has become a habit—the result of morbid fear—the occupation room offers a most effective opportunity for annihilating this fear and establishing the patient again in normal habits and natural relations with his fellow-beings. The activities of the occupation room become the subject of wholesome interest and conversation outside of the room itself and so react

favorably on the whole institution. In many instances entirely new ambitions have been permanently aroused. The possibilities of the continued use of some of the work outside of the institution have been eagerly developed and profitably followed as strength returned, and so have helped the solution of the always perplexing question for the person whose nervous strength is small but who longs to use effectively what little he has.

In some cases the beginning of work must be apart from others and under individual instruction. Even in these cases, it is important, if possible, to bring the patient to the occupation room at times when it is not in use by others, so that he may become accustomed to the new surroundings and interested in the opportunities there presented. If he gets started in some work which requires the apparatus of the room, so much the better, as he will eventually the more easily merge with the general activities and life of the room.

Perhaps the most essential element in the success either of an occupation room in an institution or in the use of manual work as a therapeutic agent with the individual patient in the home or elsewhere outside of institutions is the teacher on the one hand, or the nurse on the other. Leadership and example are necessary. The German physician who always worked in the garden *with* his patients recognized the surest way of keeping them interested. It is futile to put work into the hands of the sick and expect them to create an interest in it. A dozen kinds of occupation may be suggested, material furnished and explanations and directions given, but without the constant cooperation of the teacher or nurse, without the daily expression of interest and the stimulus of example, the work is either never begun, or, if begun, is soon thrown aside. The personality of the teacher and nurse therefore becomes an important factor. Her real enthusiasm and love for the work react most powerfully on the patient. The daily support of the leader, the development of a common interest in the work, a judicious arrangement of the times and seasons and resourcefulness in suggestions are among the desirable requirements for success.

The physician's function is primarily to determine the question of the need and advisability of manual work and then to prescribe carefully the amount, watch the results, guard against fatigue, appreciate the work accomplished and encourage the wise persistence in it. There should be the closest coöperation between the doctor and nurse or teacher. While of necessity much latitude is given the latter, she should be trained in the keen observation of signs of overfatigue, and be able to analyze her patient sufficiently to determine whether the fatigue comes from the too great strain of the mechanical effort or from more subtle causes of worry, discontent, unnecessary friction with her environment, etc. Failure and even harm may result by the prolonged effort of a conscientious person to peg away at some kind of work because he doesn't want to offend the doctor or nurse, but which is in itself distasteful and entirely wanting in interest for him. The observing nurse will note such a condition and substitute some different work which will appeal to the patient. It must always be borne in mind that a loss of interest in all kinds of activity and a loss of the power of initiative are frequently symptoms of the condition which is being treated. It is therefore a part of the problem to arouse and foster interest and fan the flame into real enthusiasm at last. It will sometimes be the task of the nurse to prevent the patient from overdoing when his interest develops faster than his strength; and here, too, tact and care are requisite to keep the patient within his limitations without discouragement.

The recognition of the need as well as the practicability of instructing nurses in various ways of occupying their patients was a direct outgrowth of the attempt to furnish occupation to the patients in the sanitarium.

There is nothing in the life of the modern sanitarium which calls for louder protest than the unemployed hours which furnish the patients opportunity for self-analysis and morbid brooding, or, what is equally if not more insidious in its baneful effects, an opportunity for the exercise of a natural tendency to get con-

fidential and discuss in minute detail symptoms, experiences, doctors, nurses, treatments, causes, mistakes, theories and conclusions, conduct, food, management, etc., *ad infinitum et ad nauseam*. The opportunity to discuss these petty matters, the lack of stimulating thought, the narrowness of the horizon, the prevailing sentiment among a large number of invalids that there is nothing for the patients to do but lie back and wait and that somebody or something will do all the rest for them—this, as a part of sanitarium life, led to an effort at the Adams Nervine Asylum to meet the demand in part by the building and equipping of a house devoted to the occupation and treatment of patients. Much importance was placed on the occupation room, wherein opportunity was provided for various forms of interesting and useful work. Weaving rugs and finer fabrics, basket work, bookbinding and clay modeling were employed at the start. Fortunately there was secured an excellent leader, trained in teaching, conversant with the work to be taken up and interested in it. The room was open at definite hours each day, but at other times those who wished could work without the presence of the teacher if their condition permitted. A rigid rule against the discussion of symptoms or any matters relating to illness or treatment was enforced and the room became at once a cheery and attractive place. The atmosphere of interested activity prevailed. The work became the source of new purposes, of changed avenues of thought and of stimulated ambitions. Other kinds of work were introduced from time to time, such as leather work, brass work, free-hand drawing, chair caning, the manufacture of photograph albums, notebooks, etc. The department was a success. The evils of the idle association of nervous invalids were in a measure remedied, and a more positively wholesome spirit pervaded the institution.

As this department developed under its efficient leader, it was noticed that the nurses became interested in the activities of the occupation room. The results attracted their attention. Sometimes they were allowed and at other times requested to come

with their patients and work with them. Requests for permission to use the room when off duty were granted. Nurses and patients became interested in the same kind of work and the mutual interest was stimulating to both. Graduate nurses, conscious of the value of occupation for their private patients, began to return to the sanitarium for suggestions and instructions. Most nurses felt keenly their lack of resourcefulness in supplying some kind of occupation for their convalescing and nervous patients. The sanitarium equipment provided opportunity for instruction in many forms of simple work. Practical teaching in ministering to the sick was furnished in the training school for nurses, why should not lessons in occupations for invalids be included also in this curriculum? The author of this book, being the Superintendent of Nurses, saw the need and the opportunity. The hours available for instruction of nurses were already full, but the summer months were comparatively free from training school exercises, and the nurses were found willing to devote an afternoon each week to talks and practical work in this line. The interest deepened. Nurses were found employing their off-duty time in the practical working out of the ideas suggested and demonstrated in the lessons. The occupation room was placed at their disposal at certain hours and one or more of the nurses could often be found there busily interested in some work which had been assigned or which had been taken up voluntarily. Problems were given and worked out involving the question of occupation for a patient suffering from this or that malady, or living in a real or imaginary environment under certain definite limitations. Graduates in private practice came back with the real problems of their special patients, and so the practical need was verified and the department in the instruction of nurses in methods of occupying their patients was created and organized. Exhibitions at the sanitarium of the work accomplished by patients and nurses resulted in the awakening of the interest of the superintendents of other training schools in this subject. Requests for talks to the nurses of these schools

were received and granted. Soon came demands for the exhibition in other cities and for explanatory talks and demonstrations before nurses engaged in advanced courses of study, and before nurses' alumnæ associations. The strong appeal which the subject made to the graduate nurses in active work was particularly significant.

There are nurses and physicians who are naturally resourceful and clever in providing useful diversions and occupations for their patients. There are many more who are not, but who recognize just as clearly the benefit to the patient of such interests, and experience a feeling of helplessness in their inability to supply the need. Such a feeling of helplessness deadens hope and enthusiasm. It leads the nurse to regard as practically hopeless certain invalid states which her reason tells her ought to be helped, but her own experience tells her are rarely much benefited. If they get better it is because they have worked out their own problem, and the nurse finally accepts that as the only possible solution and is content to wait patiently for the uncertain result. Nothing can be more destructive of the nurse's enthusiasm and active interest in her patient than this. Nothing can be more destructive of the patient's ambition and hopeful effort to recover than to be left to a monotonous succession of days and weeks of waiting for something new to happen.

By routine instruction in the classroom, by personal talks, by advice showered upon them in graduation addresses, by textbook and magazine articles, by the related experiences of recovered patients, nurses are constantly being impressed with the fact that the technical and mechanical part of their work is but one aspect of their professional duty, that a broader conception must be attained—a sense of obligation to minister to the individual as well as to the disease. The value of wise human sympathy, of cheerfulness in word and mien, of tactful dealing with unreasonableness and irritability, of skillful diversion of thought from pessimistic channels, and many other desirable

qualifications are emphasized as essential parts of the trained nurse's equipment for her work. All this is right and true. But the best intentioned nurse, who aspires to do her full duty toward her patient and who recognizes pretty clearly the line of action which would help, has often found herself bewildered and helpless in her effort to meet the need.

The instruction of nurses in these lines is therefore a matter of practical value, and far-reaching in its influence. Not only is the knowledge thus obtained a useful addition to the nurse's working capital, but it serves efficiently as a reminder of the wide scope of her functions, and helps to make her thoughtful of the deeper needs of her patient. A determination to meet this need will be strengthened by such instruction. The inventive power will be quickened and greater resourcefulness developed.

A nurse who has noted the return of an expression of interest to one who has long been apathetic, who has been able to preserve this interest and lead it on to a desire to act, who has nurtured this feeble desire into a willingness to try, and who finally has turned the effort into an accomplished fact with a tangible result will appreciate the value of occupation for invalids, while the larger possibilities which it holds out to certain classes, particularly those whose obstacle to recovery lies in perverse fixed habits of thought or the insistence of morbid fears, abundantly justifies patient and interested effort for long periods of time.

CHAPTER I

METHODS OF TEACHING

The teaching of occupation lessons to nurses comes directly in the line of manual training but is a newer adaptation of this most valuable department of study. Just as provision is made in the training school curriculum for cookery, massage and various appropriate branches, so a place may be found for this also. A proper lesson in cookery requires a longer period than one in anatomy, in order that there may be time for some review and explanatory work before the actual constructive study begins. It is likewise most desirable to secure for this occupation class a two-hour period. If the attempt is made to give the explanatory and theoretical part of the lesson while the actual work is being done many interruptions will occur and less purposeful work result.

Materials being all at hand and systematically arranged before each pupil, the class may be assembled as for other study. It is well for the teacher to adhere to a single subject in each lesson. It would not be wise to attempt to teach one-half the class a lesson designed for a feeble old man and the other half one for a sixteen-year-old girl. Although there may be many kinds of work going on they should all point in one direction. In all classes there are the swift and the slow, the clever and the dull. One nurse will complete a piece of work weekly, while another will use up an hour in doing what the first would complete in twenty minutes, therefore it has seemed best to draw a sharp line between finished and unfinished work, one table being reserved for the laggards while the more fortunate are sent to the new work table. The desire for promotion has influenced speed to a considerable extent.

It is essential that a carefully kept notebook be required. If the work be carried on without this the pupil may produce excellent work but when graduated will not have proper directions or patterns, will not know where the necessary materials may be obtained, or just how things go together or why they are placed in a given lesson. If the blackboard shows the subject of the lesson and the leading principles aimed at in its presentation, the detail may follow in the notebooks. For the most part the instructor will do best to watch the work in the hand of the individual student; occasionally, however, a demonstration before the class of some special work may be a saving in point of time. In any case it will be an extremely busy period.

Leaving room for originality, the value of models must not be forgotten. If the student can be set down facing a good model, the instructor is relieved of a large part of the teaching. The models should, of course, be of the best and the pupils cautioned against, and taught to observe, their defects and to preserve their excellencies. Pupils will be of many sorts; those of quick insight who select materials with little hesitation and take themselves off to some quiet corner to bring back some charmingly worked out scheme. Perhaps there will be two out of ten of this class. The average pupil works along rather laboriously but with a certain interest and satisfaction in results. After these come the trials, those whose hands seem not to be a part of them, those who work while the instructor is beside them and then wait until she gets around again. Perhaps the saving grace in this work is its variety. The pupil who made shipwreck of a Canton flannel dog turns out an excellently bound book; the one who flounders and gasps over a piece of paper folding will knit a shawl with good, steady strokes. But because they are nurses and will be called to suit all sorts of men and minds they must learn to do the things for which they care little, if by so doing they can supply the needed interest to the patient dependent upon them.

It is not possible or desirable to have each separate pupil attempt all the kinds of work. Choice may be permitted to a degree but not altogether—the thing chosen may often be allowed after a less attractive piece of work is completed. There is danger that too much time may be spent on a popular form of work. Every pupil wants to make one of these articles, and in consequence an estimate of value out of proportion to the time allowed results.

The real problem of the nurse is to find means whereby she may initiate and actually lead and coöperate in forms of occupation suited to every invalid condition and any natural temperament. She must possess within herself that which may be offered to young and old, rich or poor, man, woman or child. Those things popularly termed amusements in no sense supply this place. In the valuable little book, "The School and the Child," Dr. Dewey writes: "By occupation is not meant any kind of 'busy work' or exercise that may be given to the child to keep him out of mischief or idleness when seated at his desk. By occupation I mean a mode of activity on the part of the child which reproduces or runs parallel to some form of work carried on in the social life. The fundamental point in the psychology of an occupation is that it maintains a balance between the intellectual and the practical phases of experience." This being accepted it may be placed over against the invalid's feeling of being interrupted in his legitimate work, of being relegated to the physical repair shop. Here let the occupations serve to keep up the connection with the social life. Although forbidden to look into the faces of his friends there may still be strong and tangible relation between the invalid and other men and their needs; thus self-respect is preserved and ambition fostered. Only by observation of many examples of such activities and by consideration of all sorts of materials, especially those commonly overlooked, can the pupil nurse attain to anything like an equipment for this inestimable service. Choice she must be allowed, but not to the discarding of a single scrap of valuable

and available material. Her choice will need much education before she wakens to the sense of the greatness of her resources in any home, the poorest not excepted. She will never be a truly good nurse until she can produce something out of what others call nothing. She must possess a prodigality of ideas sufficient for any demand. Let the thought be uppermost throughout the course that the nurse is learning to do these things in order to teach another and, realizing this, she will work out any problem and truly rejoice in the finished product and acquired skill.

The arrangement of materials in such a way that a sense of beauty is reached early in the constructive process will be of great value. This is more possible than may always appear at first. In the making of what, for lack of a better name, are called cut-out pictures, the work may seem stupid in the beginning, but if the papers collected be grouped in harmonious color combinations even before their application, a color charm will precede actual work and hold to great extent the pupil's feeling until the form and general effect be produced to strengthen her idea of the value of the work. There is perhaps no greater principle to be taught than that of the quick recognition of beauty in despised and discarded materials. It is really a question if any place can be called truly barren of such material, certainly no home need merit the term. The only barren thing is the mind which is unable to recognize its resources. In a class of undeveloped nurses there will be a strong tendency to employ crude colors and sharp contrasts. The knowledge and appreciation of color and its delicate gradations are productive of far-reaching effect. The student's own clothing will be better chosen, and it may not be too much to feel that even tones of voice and muscular tension in general may be thereby modified.

Whatever the work let it possess a certain dignity. Do not encourage the employment of time on unworthy materials and purposeless productions. A bit of waste paper may be folded so as to teach a great principle, while ten sheets of wadding may be gobbled into uncleanable table covers and mats to perish of their own unworthiness.

Having, then, secured a proper lesson period, provided for both bright and dull pupils, required well-kept notes, secured good models, arranged for great variety of subjects and permitted legitimate choice, the way is truly opened which leads up to beauty and dignity of the product and the culminating sense of time well spent, even though it be within the four walls of a sick-room.

CHAPTER II

THE TEACHER

The desire to place occupation studies in the curriculum of the training schools makes way at once for the question, Who shall act as teachers? A very different set of qualifications is necessary in the teaching of the sick from those that suffice in teaching the well, therefore those attempting to teach nurses the art of teaching the individual patient must themselves possess like qualifications. One teaching invalids should be familiar with the limitations imposed by all sorts of diseases. She should be able to find just the thing which a person suffering from chest troubles might safely do without aggravating symptoms, while she should be no less appreciative of orthopedic cases. She must detect eye strain, know and heed the early signs of fatigue before the patient is himself conscious of it. Nervous disorders and temperamental differences must be read and appreciated individually. She must be able to observe the patient closely for long periods in order to do really fine work by this method of treatment. All things being considered, it would seem that, given the necessary training, a nurse would be the one best suited to this work. There may be a feeling that most successful nurses are far too busy to take time for this special training. The group which promises well for this is made up of those nurses who have already had a somewhat long experience in private nursing, who have come to a realization of the great need and also feel the strain of nursing, so that a six months' course to be followed by an opportunity to teach sounds refreshing. A class made up in this way would be a desirable and certain aid to the work. There should, if possible, be some natural ability along these lines; still, given genuine

interest, the chances are good even with limited knowledge at the start. Here and there may be found a kindergartner or craftswoman who will do good work provided she can grasp the conditions, but it will be almost necessary to train her first to nursing, for the double reason of gaining free access to the patients and the proper adjustment of work to abnormal conditions. When patients are strong enough to go to a workroom or shop the need for nurse teachers is not so manifest; but when the shop is the sick-room, and the bed the bench, it is almost a necessity that the nurse be the teacher. Certain eminent neurologists have prescribed for their wealthy patients a lesson once or twice a week to be given by some qualified craftswoman. In one instance this was bookbinding. This invalid was shut away from all with the exception of physician, nurse and this teacher who gave one lesson weekly, leaving some one definite problem to be worked out by the patient with the assistance of the nurse. This proved a wise and profitable arrangement. Teachers of basketry, chair caning and other hand-craft are employed by the city of New York to visit and instruct the poor in the various city institutions. This is surely a great step in the right direction. Hospitals have, however, been singularly overlooked in this respect, and it is only here and there that the trustees of such institutions are becoming cognizant of the need from the standpoint of the patients' own welfare.

It is not enough that the teacher be prepared with three or four forms of occupation. It is a very great mistake to teach basketry or any other one thing to all classes of invalids. The variety for choice needs to be almost inexhaustible. Work which proves a distinct sedative to one patient will drive another wild. One must treat symptoms by the "work cure" as well as by drug treatment.

In conducting these classes among nurses it sometimes happens that a teacher is developed unconsciously. In one class three kinds of work were going on; this was requiring more personal attention than the one teacher could bestow. Without

being asked one pupil quietly assumed the teaching in one of these groups, carrying it along with good success. It is a cheering thing when this takes place.

The field is already well opened for this work; teachers will surely be in demand. They must possess resourcefulness, unfailing patience, quick perception of capacities and limitations, an enthusiasm which can anticipate for the patient the attractiveness of the finished product and the insight which substitutes a new piece of work or a new phase of the old before the patient is conscious of weariness or distaste. Such teachers exist and may be developed, although they are none too frequently met. They should receive quick recognition and careful training.

The first requirement then in a teacher for this work is that she be able to understand abnormal conditions. Nurses come at the head of the list for these reasons: they are of necessity constantly with the patient, they have a certain scientific knowledge, they have been taught all along through training to work with the hands, and they themselves need the change offered by a newly developed phase of their own work. Kindergartners will be of very great service if available. Craftswomen will be of highest value in preparing nurses in special branches and in teaching directly the accessible invalids. Pupil nurses may receive a special normal training under some circumstances. For instance, application is made to a small school having done this work to teach the pupils of a large school. These large classes are subdivided, and under a competent head teacher the pupils of the smaller school are made responsible for the instruction of single groups of the larger school. To make this possible the thing to be taught should be definitely decided and steadfastly adhered to; the pupil nurse should know long before that she is to teach this thing. Thus stimulated few pupils will fail to respond. The main trouble with the pupil nurse lies in her failure to make strong connections between occupation and nursing. She feels that the essential experience lies in witnessing and assisting at unusual and striking surgical operations, but

out in the world of private work she will get little of this; what she will get will be the long twenty-four hour day, the seven day week, the thirty day month, and even the three hundred and sixty-five day year, with only the monotony of diminished powers. Whatever renders these long stretches fertile and hangs even the smallest fruit on the weak branches of the tree of life will never be a matter for regret.

CHAPTER III

NECESSARY EQUIPMENT

In order to teach occupations in institutions certain equipment is necessary. This, however, may be reduced to very simple forms. Much of value might be taught in a common sitting room if no other place be available, but far better would be some rather empty supply room. An attic may be utilized. Light is essential, but beyond that other equipment may be improvised. Not less than two large tables, long and narrow rather than square, will be found practicable. For the stock a generous space in the form of wall closets or shelves and a special wall-case to hold finished work in such a way that it can be displayed without continual pulling down is much to be desired. There should be some heating apparatus, an electric or gas stove for cooking paste, heating flatirons, etc., for example. A small letter press is very useful, and a patent paper cutter for cutting pasteboard and other materials. Few rather than many tools should be employed, since this training is designed to teach nurses how to set invalids to work in their own rooms. The sick-room is to become a workshop, therefore to bring in or to demand a supply of tools would make the undertaking assume burdensome characteristics in most homes. The very zest of the thing often turns upon its being accomplished by a person below par and with small and heretofore unrecognized resources. In this way the tools common to every home and almost to every room are the ones on which the work should depend. To scissors, needle and thread, pen-knife, paste brush, ruler, glue pot, add a pair of pliers, an awl or two, a small hammer and a few tacks. If fortunate enough to find tools in the house a nurse should show that she knows how to use them, but if none are found she can be equally credited with knowing how to get along without them.

The actual materials used are many and varied. Here, too, it is desirable to make much of such as may be already at hand. In institutional work great quantities of such material will be donated by friends if the need is made known. Some material, as basket stock, leather, fancy paper, etc., must be bought. Pupils may be required to pay for this if they wish to keep the product.

If the instructors have open eyes and are ready to seize upon anything which may be converted into useful stock by being wisely arranged, it may be found on every hand—papers from bundles, backs of catalogues, old magazines, bits of leather, paper boxes, newspapers, soiled blotters, scraps of cloth, bits of wood, and so on, *ad infinitum*. Each of these suggests a thing fashioned for a purpose and capable of supplying some definite need. All these should be carefully classified. The workroom should never present the appearance of a general rubbish pile, but that of a well-ordered stock-room. Paper boxes plainly marked and placed on convenient shelves may contain this stock and much more of the valued material. A blackboard should be available. It is also desirable that a couch or bed be included in the outfit, as the only satisfactory way to teach a lesson for restricted position cases is to have a model which may be one of the class. By this means it is possible to put the nurse in place of the patient, and thus learn what may really be done. A simple bed-desk or inclined table will be described later.

Briefly summarized the equipment would then be: a good-sized room, well lighted; two long tables; a heater; stock closets; a few common tools; blackboard; couch; bed-table or bench; and classified materials.

CHAPTER IV

THE CHILD OF POVERTY AND THE CHILD OF WEALTH

Both the rich and the poor child come, during severe illness, under the care of the trained nurse. In the case of the former the disease may be far from severe, indeed, many times there may be no real existing disease, but for the less rugged child of the rich a trained nurse may be employed for long periods. Aside from the consideration of the poor child in the hospital, and dealing with him only in his own home, the period will be necessarily brief. Provided for as this child must be by some charitable source, church, lodge or individual gift, his time in the hands of a trained nurse will not be extended beyond necessity. By the introduction of occupation treatment it is to be proved that the so-called poor child is rich because of his apparent poverty, while in many instances it is quickly perceived that the rich child is poor because of his riches. The first lesson has been prepared for a poor child of four years, recovering from a pneumonia. It has been proved in the working out of this lesson that its principles are equally applicable to the child of wealth. The spending of even the smallest sum of money for materials for this lesson is strictly forbidden. A nurse who can fashion a great variety of interesting objects from the barest scraps becomes in the estimation of any child, rich or poor, a sort of magician. The rich child is surfeited with expensive and beautiful toys of which he soon tires; they are too perfect to be interesting unless destroyed in order to learn their secret, which piece of work is often undertaken if the child be left alone. But let a wise nurse take these fragments from the wastebasket, together with all sorts of utterly despised and discarded material, and from these produce a new and attractive toy and the creative spirit wakens and the child will not fail in appreciation and response.

What then shall constitute the stock of material in the poorest home? Do not for a moment think of it as being meager. As this lesson is taught year after year it seems well-nigh boundless. The entire summer could be spent with profit on this first problem of the profitable occupation of a child without the expenditure of money. The realization of resources is the first and mightiest principle. From this one never escapes. If success is won it is because of, and in direct proportion to, the ability to understand and apply this great power. What comes into this house of poverty? Bits of paper from packages, here and there a colored paper from the drug store, a piece of wall paper, the colored cover of an old magazine, the label from a can of tomatoes. Treasure each clean bit—paper bags from the grocers, any sort of pasteboard box, all kinds of advertising pictures, newspapers, scraps of leather cut from an old shoe perhaps, the shell of every egg used, a potato, turnip, lemon, a peanut, an apple, a bit of wood, pins, toothpicks, cork stoppers, seeds of fruit or vegetables, bits of crayon, strings, scraps of worsted and cloth of all sorts.

From common brown wrapping paper make a HOUSE, cutting in this fashion:

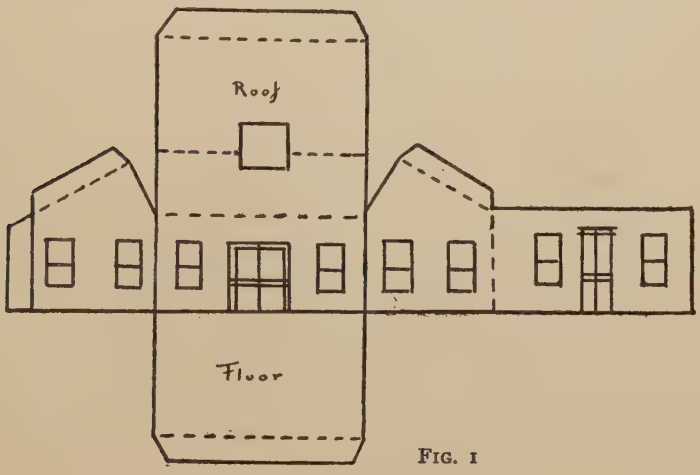


FIG. 1

This house forms the nucleus around which a large number of related objects gather. In the same manner fashion barn, woodshed, dairy, pigpen, etc. Children are attracted by a logical series; their thought in this often outstrips that of their elders.

A farm without animals is absurd; they too must be cut out, and who without practice can cut out a first-rate cow? Sit down in a leisure half hour and see how many animals you can cut out and come fairly near to the originals. An excellent study for this work is a paper Noah's Ark. The "two of a kind" may be cut together. This opens the way for wall decoration. The ordinary walls of a sick-room are often very wearying. This need not be. There is no reason why a patient, young or old, should not live in different places while confined to the bed. Suppose that a long strip of green paper can be found; above this paste another strip of bluish gray; have the latter some two-thirds the depth of the former. Beginning with the ark and the men and women thereof, follow with the procession of animals. This picture-story will go a long way around the room. Some children simply tear out animals with surprising accuracy, using no scissors. One feeble-minded boy who could be taught little else did this well. This first piece may represent the Bible story. A Mother Goose story which gives a good progression, such as "The House that Jack Built," "The Old Woman and Her Pig," "Sing a Song o' Sixpence," etc., will work out well in this. A fairy story, as "Cinderella" or "Jack and the Bean Stalk," may be added.

A child's room may easily be turned into any part of the world. Clusters of roof tops and chimney pots running along the lower edge of a paper frieze give a chance to compare architectural features, while speeding through the sky overhead Santa Claus and his reindeer hold the child's thought in the old spell. Flying machines and windmills can be introduced with great effect.

Learning to stitch up a book correctly for a picture and

PAPER–BOX HOUSE

story-book will be worth while. From common brown wrapping paper cut even rectangles twelve by eight inches, folding once to make the page six by eight. Place from three to four of these one within the other to form the sections, or signatures, of the book. Six such sections will make a very good-sized book. Now find some bits of tape or even strips of cotton cloth of good color; cut in four or five inch lengths; if the book be small two strips will be sufficient. Holding all the sections closely together in the left hand, stretch a tape tightly across the back one-third of the way from the top and mark plainly with a lead pencil on either side of the tape, making sure that each section is plainly marked. At the distance of two-thirds from the top place the second tape and mark in the same way. Remove tape and draw a single line three-fourths of an inch from the top and another single line the same distance from the bottom of the book. (Fig. 2.)

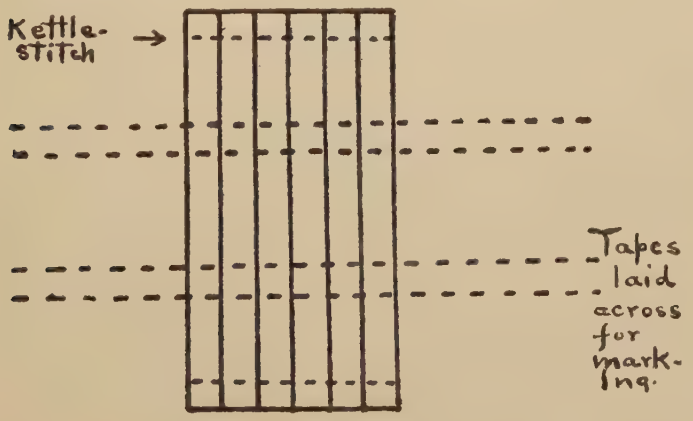


FIG. 2

After marking thus, open each section in the middle and, with a large needle, prick through all the leaves at the points marked on the back. Take a very long double thread of linen or silk in a large needle, having no knot at the end of the thread. Pick up the first section, open in the exact center, sew through

the first upper hole from without inward, leaving two inches of thread hanging loosely outside. Sew out through the next hole, which will be at the top of the first tape, lay this tape across and sew down *over* it but not *through* it to the center again. Repeat this over the second tape and bring the thread up to the outside through last hole. Place the second section of the book close to the first and sew down through the lowest hole, over the two tapes, out through the upper hole. Tie the loose ends at the top of the first section to the long thread, leaving them an inch long after tying. Continue down the third section in the same manner until the bottom is reached. As the thread is brought up through the last hole a sort of half-buttonhole stitch, called by binders the "kettle-stitch," is made by slipping the needle under the stitch of the next preceding section and holding the thread in a loop in front, then drawing up just as in buttonhole stitch. This is repeated at both top and bottom of each section and serves to hold them firmly together. When all are sewn, tie securely and leave an inch of thread, which is tucked down between the sections, as are the first threads. Draw the ends of the tapes evenly and paste down firmly to the upper leaves of the book. Allow to dry thoroughly. This makes a strong book and is one of the methods employed by fine binders.

The next thing is to gather up any pictures from newspapers or any source, pasting one or two on a page with ample space between for the text. When the pictures are all in, write or print a story composed for the purpose of connecting them, using them as illustrations. This story may be of joint authorship. The value of advertising pictures is great in many lines of work.

House Furnishing by these same advertisements is another source of pleasure. From a pasteboard box cut uniform-sized pieces for the rooms, and with a few lines indicate floor, ceiling and walls; little or no perspective may be employed. Select wall paper, carpets, window shades, etc., of paper, pasting and fitting neatly, cutting out the furniture from the advertisements.

Arrange the various rooms of a house with its occupants. This may be done in a book or on separate sheets of board.

PAPER FOLDING opens up a wide range of profitable entertainment. Paper folding proper does not include cutting or weaving, but the fashioning of various objects, usually from a square, eight inches being a favorite size. The very first essential is that the paper be exactly square. Paper which is tough but not too heavy will work best, but all sorts may be used, and one can always get a piece of paper. Children traveling may be kept occupied and happy by this for long periods; nor is the interest restricted to children. A good piece of paper folding represents a fine mathematical problem. Men like it and a piece thus left with a patient affords an agreeable puzzle.

There is a series of boats which will be sure to interest. THE DORY may be folded in three different ways: First method. Fold an eight-inch square evenly through the center; open, fold the lower edge up to the central fold and crease; fold the upper edge down to central fold and crease; open, turn paper around and repeat the same folds the opposite way, making sixteen squares altogether. Turn paper over and fold one side so that the outer fold meets the central crease; turn paper over and fold

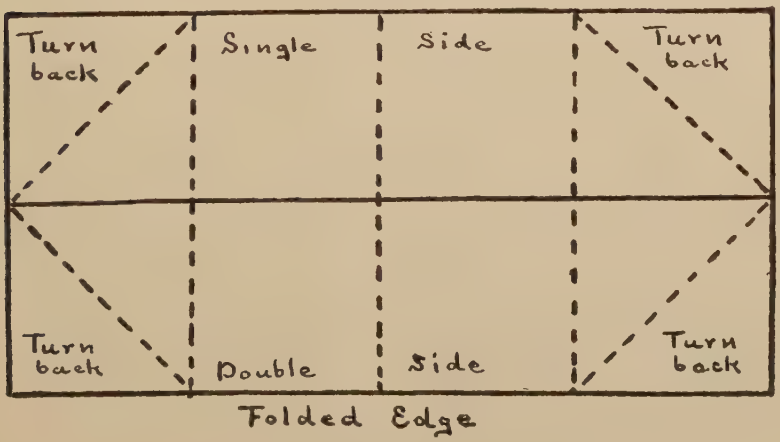


FIG. 3

a small half-square in each corner of the thin side; now fold two small half-squares in each outer corner of the thick side through all the thicknesses; now fold the thin side down over the thick side and open through center for boat. This makes a dory with a sharp-edged bottom which will not stand on level surface. (Fig. 3.)

Second method. Fold a square diagonally; open, fold the other diagonal; open, fold straight across the diameter; open, fold the other diameter; leave this folded; fold down each folded corner to the center; open at bottom and crease so as to form a square; turn up the loose points to top and crease; open again to form smaller square; turn up corners again. These last will

FIG. 4

be very thick; open again and turn up the corners. Pull out the two points at either end, leaving a point which stands up in the center, forming a base on which the boat may stand. (Fig. 4.)

Third method. For this dory an exception is made and an oblong takes the place of a square. Fold evenly across the shorter diameter; fold the two double corners down to the center; this will leave a narrow edge at the bottom which is folded back on each side like a hem. Now open at the bottom to form a square and turn up the corners to the top as in the preceding example; repeat this and open in the same way. If made of paper of different color on the two sides the effect is of a boat with a painted border around the inner side.

SAILBOAT. Fold the diagonals and diameters, opening the paper flat after each fold. Hold two opposite corners together, letting the other two corners fold inward toward the center, thus forming a square. Turn back the outside corners to the lower

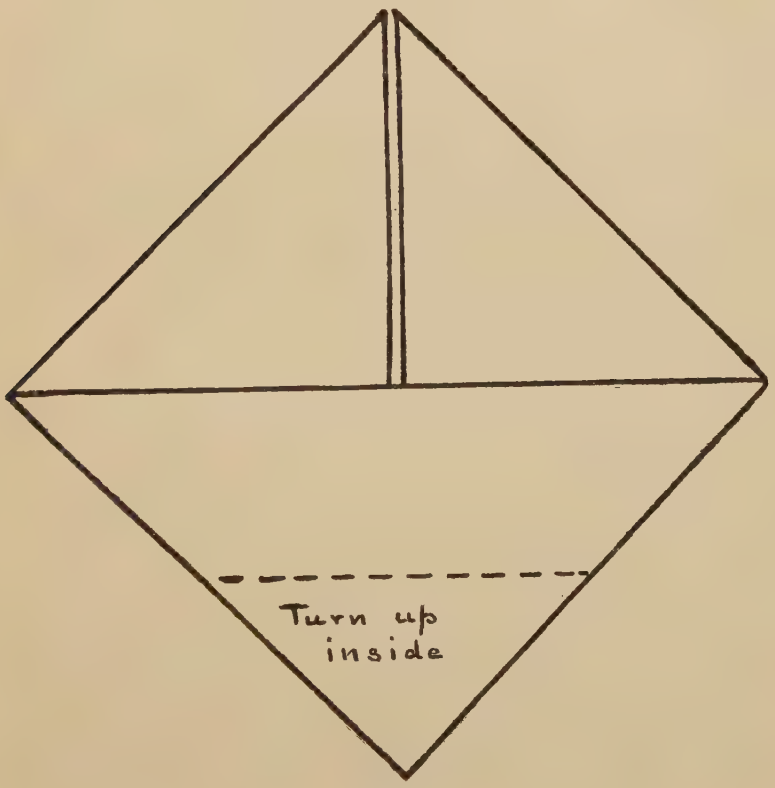


FIG. 5

corner, leaving the two folded corners standing upright; fold each of the three lower corners back on the inside to the long fold. This makes three folded edges on which the boat stands. (Fig. 5.)

THE CATAMARAN or double boat and the GONDOLA are started alike. Fold the diagonals and diameters; open; fold all

four corners to the exact center; repeat with the corners of this smaller square. Open out fully, letting the central folded square stand up like a table top, the four corners standing sharply folded outward like a stiff tablecloth. Place one side of this tablecloth on the table and fold the central square up against it; fold back through the center of the square, bringing the two upper corners exactly over the two lower; crease firmly and open on the long folds and stand up; this forms the double boat or catamaran.

Continuing with this, the gondola is made by turning the corners of the double boat back upon themselves, first from point to the bottom corner, then the folded corners back on to

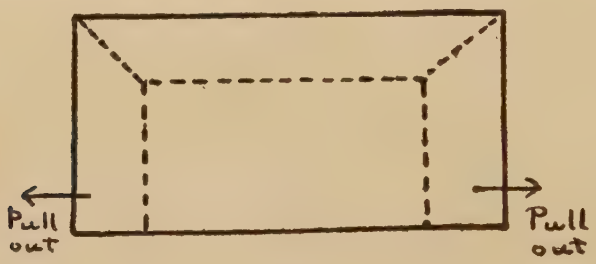


FIG. 6

the side of the boat; leaving these tightly folded, open all the other folds to form a square box. Now make a strong fold through the center of the folded corners on two sides of the box, bringing the outer edge just even with the bottom edge. This gives the suggestion of a frame with mitered corners, as the folding of the thicker sides draws the thinner sides down so that they easily crease lengthwise through the center. Now, holding the frame towards you, bend the thick sides right back so that they meet in the center of the back. Last, fold directly across these thick sides, which brings all four of the small double corners together; holding thus draw out the edges on each side very carefully to avoid tearing. This makes a curious and interesting little boat. (Fig. 6.)

THE CHINESE JUNK is a still more complicated fold, although resembling the gondola so much as to be frequently confused with it. Begin precisely like the last, going on until the first corners have been folded in to the center; then repeat this twice again, making in all three sets of corners folded to the center. Then make the double boat fold just as in the gondola; next the sharp corners are folded inward between the center and the sides, filling the triangular space but being but once folded, while in the gondola they are twice folded. Next open to form the square box, and now loosen and pull up the two opposite corners

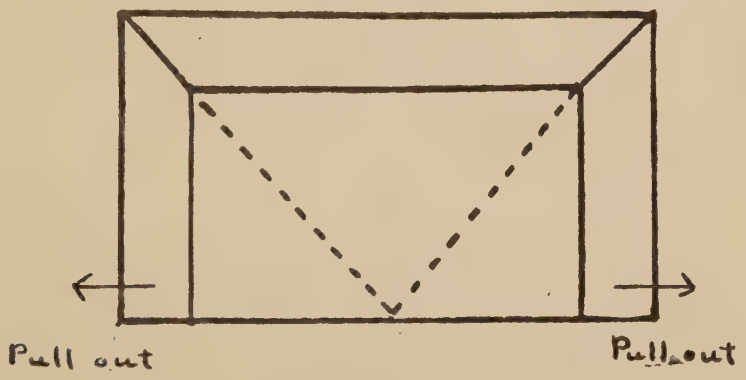


FIG. 7

from the center on the ends, having the small points on the outside. Turn these small points right back again, leaving two lids on opposite sides standing upright; fold back the outer points on these lids and crease the whole lid down firmly like a table leaf. Proceed to fold the picture frame with the thick and thin sides; make the central crease across the thick sides and pull out just as in the gondola; in this you will have two opposite little corners which, if turned outward, will allow the boat to stand. Last, pull up from the crease at either end the folds which were the lids of the box and which now form two square sails one at either end of the boat. (Fig. 7.) The things to remember in this are that the corners fold in three times before the

double boat is made; two opposite corners are pulled out to form the lids to the square box. In the gondola fold the square box has no lids.

Much of the paper folding ordinarily taught results in rather meaningless and useless figures; on the other hand, many truly charming and useful things may be made in this way. To fold what has been called "THE NANTUCKET SINK" is well worth learning, as it forms a tolerably strong toy and is very cleverly planned. Fold diameters and diagonals, open, fold all four corners to the exact center and crease; fold this double square straight through the center, having the corners on the outside.

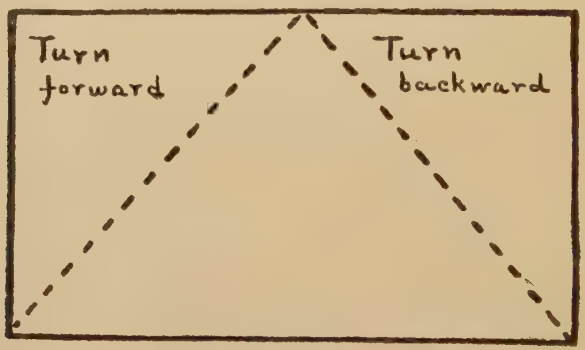


FIG. 8

Fold these upper corners of the present fold, one backward and one forward in the line open between the first corners, holding the folded side up and folding in the dotted lines. (Fig. 8.)

Now open just as the dory was opened at the bottom and crease to form a square having on each side two pockets divided by a slit from top to bottom. (Fig. 9.) Slip a finger into each of these pockets and pull out and crease down, resulting in Figure 10. Turn paper over and repeat on opposite side. Now fold back each side through dotted line. Turn back a little half square of single thickness on either side of the central fold on both sides of the paper as indicated by dotted lines, making thus four small half squares. (Fig. 11.) Now fold these sides

FIG. 9

together and you have Figure 10 again. Bring the free edge at the bottom up even with the folded edge and crease down two neat little half squares at each end of this fold. (Fig. 12.) Fold each side through the vertical dotted line which brings you back to Figure 11. Fold the sides just even with the central

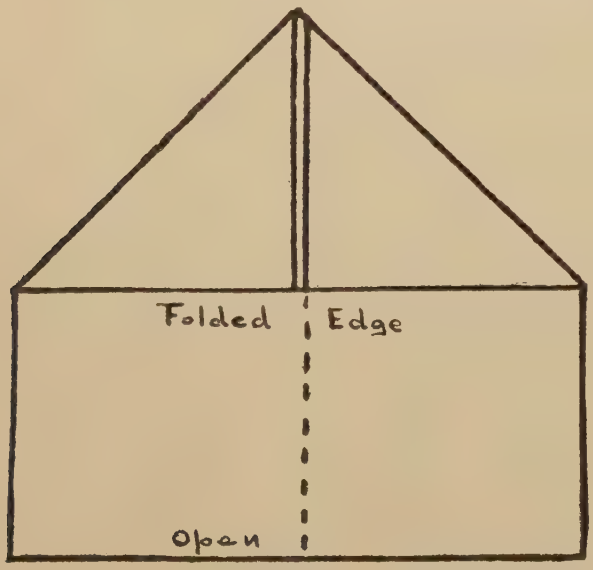


FIG. 10

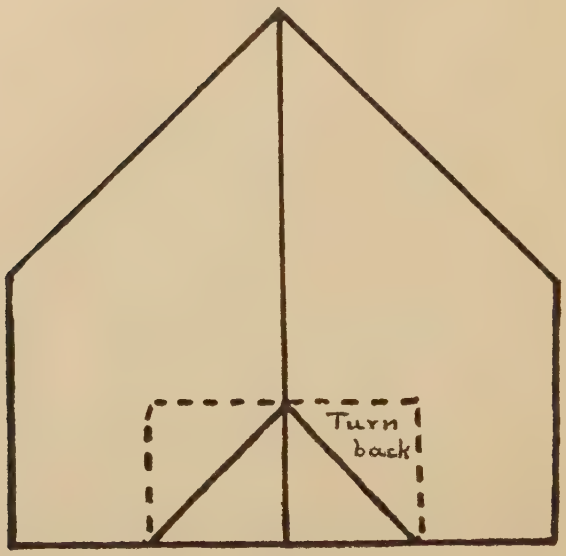


FIG. 11

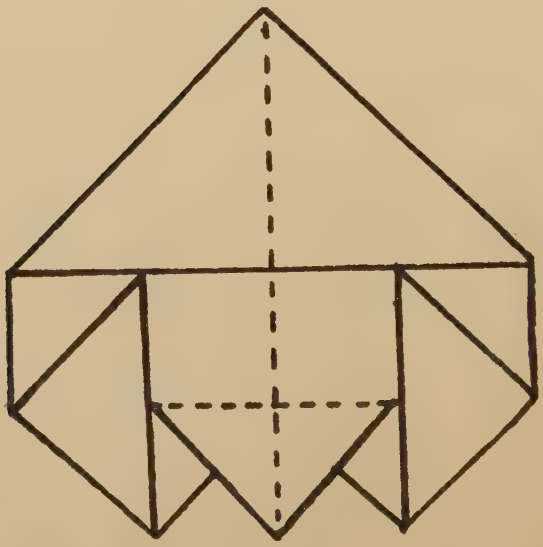


FIG. 12

line and turn the top point down to point of meeting of the folded sides. Crease down very hard and open. It will give a square, boxlike sink having two opposite shelves and standing on four pointed legs. (Fig. 13.)

The Flying Bird is one of the best folds. This, like many of the finest, is of Japanese origin. Fold diagonals and diameters, open, bring one edge of the entire square over from the corner to the line of the diagonal crease; bring the other over to meet, making a kite shape; unfold and do the same from

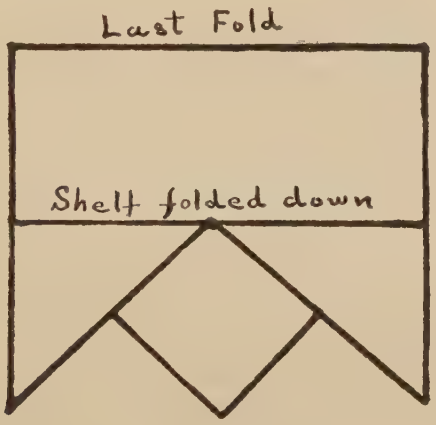


Fig. 13

each of the three remaining corners. Opened flat, the square now shows four intersecting kite shapes. (Fig. 14.)

Now, with the exact center outward, crease so that four sharp points fold upward, two flat, the two on the side being doubled and lying turned in between the two flat points; crease down well and get Figure 15. To do this, the straight sides must be turned in and the pointed corners turned out. Holding with the long points downward, turn the two flat outer ones up straight as far as they will go, leaving the two folded lower points downward. In one of the doubled points reverse the fold diagonally close up to the center, repeat on the second double

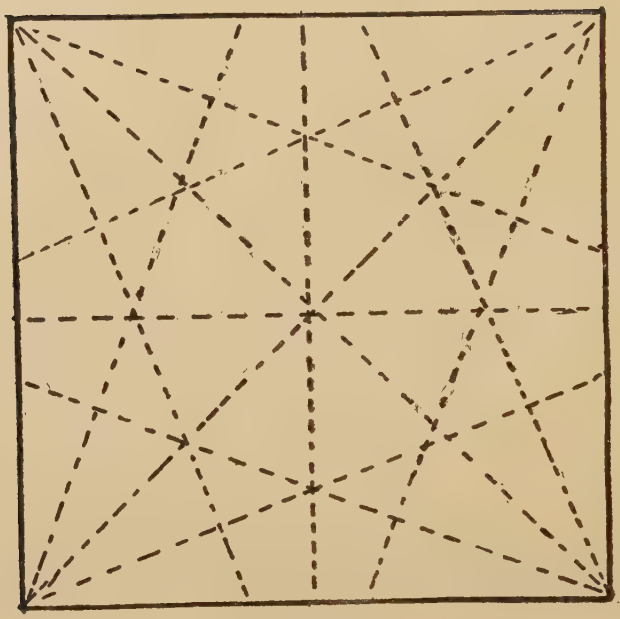


FIG. 14

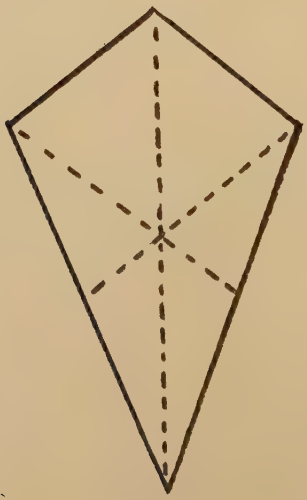


FIG. 15

point and on this one reverse again very near the tip. This gives Figure 16.

Last, roll the wings backward from the front angle at dotted line. To make the bird fly, hold with thumb and forefinger of left hand at + on back of wing, and right hand at + on front of neck, then move right hand back and forth.

This bird was being folded to teach the elder of two little brothers. Little Sam was thought too young to understand the

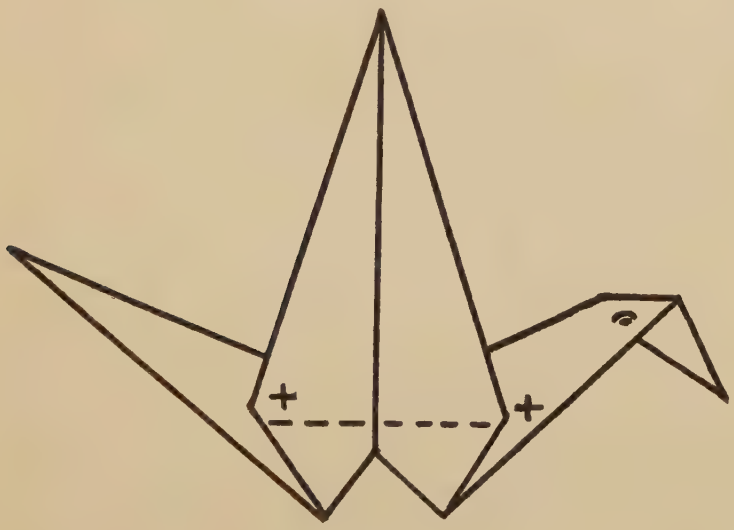


FIG. 16

process; he watched the plain square of paper gradually take shape, and at last as it flew he said with great earnestness, speaking for the first time, "Miss —— I think when you grow up to be a man, you will be a king!"

The Japanese employ paper folding with great effect. This same bird they fold and vary in many ways by turning the head, tail and wings at different angles. Not turning the tail up at all gives a white, long-legged stork; pulling the neck out straight and tail straight behind, the bird is flying swiftly through the

air. Best effects are obtained by mounting these folded figures on a background slightly sketched in with water color. The Japanese also tint and decorate the figures very beautifully. Soldiers, trades-people, women paddling through the rain, the umbrellas of folded paper, all are represented most artistically.

Most difficult of all, perhaps, is the folded JAPANESE FROG.

Fold the diagonals, open, fold diameters. Now, starting from the exact center, fold so that one of the diagonals is exactly covered by one of the diameters (Fig. 17); continue turning in this way until all the diagonals have been covered by the diameters,

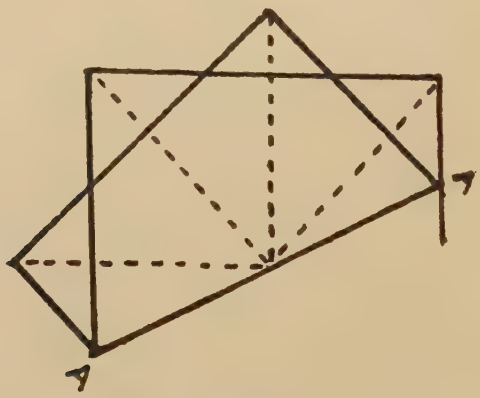


FIG. 17

creasing down the whole line A. This gives when fully opened the creases in Figure 18. Those indicated by the dotted lines are next made by folding the paper from the center of each side, bringing the edge even with the diameter and creasing *only* from center of the side to the line of the kite-shaped fold. Open. Now fold the dotted lines running to each corner. To fold this up, fold all the spaces outside the star *inward,* then fold all the lines running from center to both long and short points *inward.* This will close the paper up like an umbrella, the center making the tip. Holding it folded, go around and turn all the *short points* back towards the tip as far as they will go. Close it, leav-

ing two short points one on the top and one on the bottom and the other two folded in at the sides much as in the bird fold. It now is represented by Figure 19. You have folded on each side two *long points* creased through the center. Holding with the tip upward, fold back the two long points which are farthest from you until the sharp corner is at the central tip; crease through center, and leave closed on either side. With frog lying

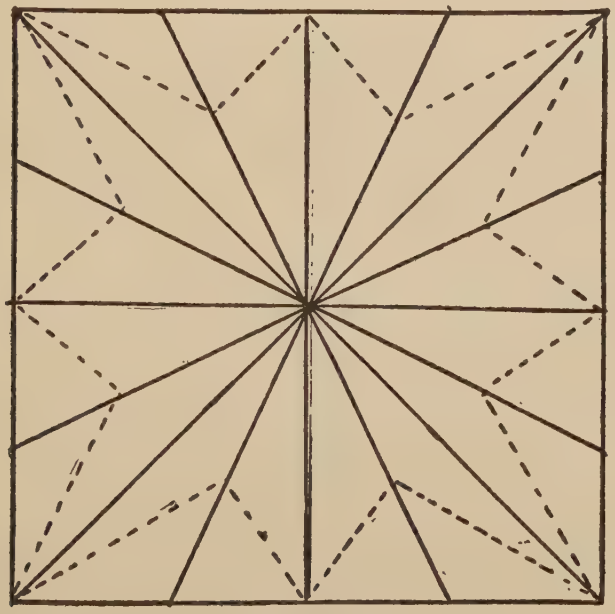


FIG. 18

flat on table turn up first fold at + and fold outer edge backward to center, on dotted line. Now do the same with the next fold under this one, making very long, sharp points. Repeat on other side. Now make two diagonal reverse folds in the long points folded in underneath; these form the front legs; in the upper long points make three diagonal reverses; these form the hind legs. Mark the eyes and mouth and lastly inflate through the opening at back. Made from tough green paper

these are very clever favors for St. Patrick's Day or other occasions.

These are only a few of the many folds. Books of directions may be found at the kindergarten supply stores. There is a series by Kate F. Hobart as well as others. The book on "Scientific Paper Folding," by Prof. David Smith, of Teachers College, New York City, will interest mature minds. The pupils of our

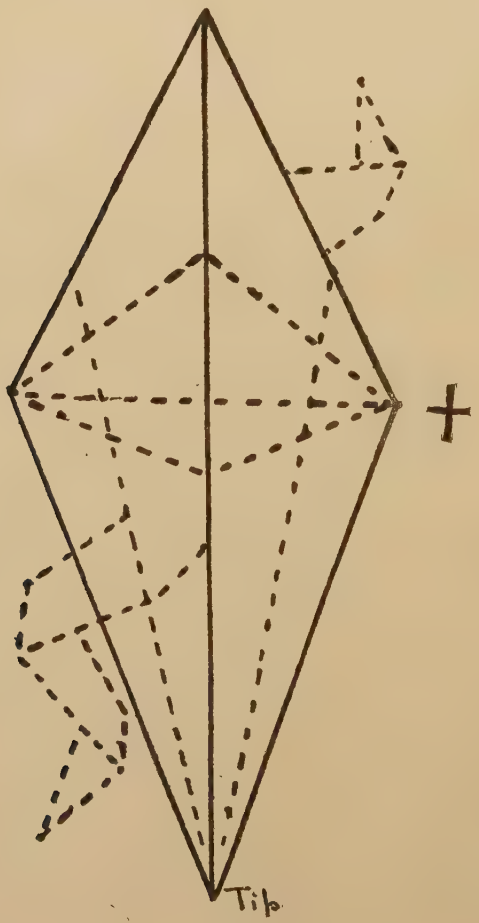


FIG. 19

school are much indebted to Mr. K. Kinonchi, of Kyoto, Japan, for the gift of his wonderful books on paper folding, as nothing can rival the work of the Kyoto Normal School in this fascinating occupation.

In Paper Cutting, as distinguished from folding, there is great variety. To decorate a child's room tie strings across from windows or doors and on these lines hang tiny paper lanterns made thus:

Paper Lanterns. From rather firm, colored paper cut a strip five inches long by four wide. Fold evenly lengthwise through the center and crease very firmly. Cut even slashes through the folded edge to within one-half inch of the top edges, each strip between the slashes being a half inch or a little less in width. Open and join the ends by pasting. Push up rather than pull down on the lantern and paste a paper strip over the top for a handle. For the light, fringe a strip of gold paper or tinfoil and gather it into a ball; suspend this by a fine thread fastened to each side of the top of the lantern.

Apple-seed Mousetraps. First save the plump, brown seeds from an apple. Cut an even pasteboard disk, marking it by the top of a tumbler. Cut another disk, exactly by the first, of bright and rather strong paper. To the pasteboard sew the apple seeds with heavy black linen thread, leaving at the larger end of each seed a long, loose loop for a tail. Arrange the mice in a nice group in the center. Fold the paper disk four times to a wedge-shaped form. Cut a slash first from one side to within a little distance of the other side, but never through; turn and cut from the other side, alternating until within half an inch or so of the point; the longest slashes begin a quarter of an inch from the edge of the disk. (Fig. 20.) Open, paste the border neatly around the pasteboard and fasten a bit of narrow ribbon or bright thread to the very center. As you lift by this to hang it up, the mousetrap opens. This, as well as the lanterns, make nice Christmas tree ornaments.

May Baskets. There is surely no prettier form of paper

weaving than the old-fashioned May baskets. For these cut two strips of paper of contrasting color. Six and one-quarter inches long by two and one-quarter wide will be a good proportion. Fold evenly across the center the short way, divide the folded edge into six strips three-eighths of an inch wide, then cut these double, leaving three-fourths of an inch on top. Both pieces are cut in the same way. To weave, hold one piece in the left hand with wide edge up; with the right hand take

FIG. 20

the second piece and hold first strip near folded end. Slip this folded end *between* the first strips of the left-hand piece close up to the wide edge. Slip the second strip of left-hand piece through the first strip of right hand and continue until all the strips have been alternately threaded one through the other. Be sure that they are slipped *through* and not over or under the opposite strips, as this ties the work together and the basket cannot be opened; to get in the last strip requires great care and the first strips must be carefully worked up to the top to make room for it. The strips must all be threaded through one another as a thread is slipped through a needle's eye, or ribbon

through a tape needle. Always work from the top towards the bottom and finish at the bottom point. The border at the top may be scalloped or decorated in any pretty way. The handle is a Jacob's Ladder. To make this take two very long strips of the contrasting paper the same width as the strips of the basket. Place one above the other (Fig. 21), and fold back and forth, always from underneath over, from side to side. Sew or paste this to the top of the side folds of the basket. For valen-

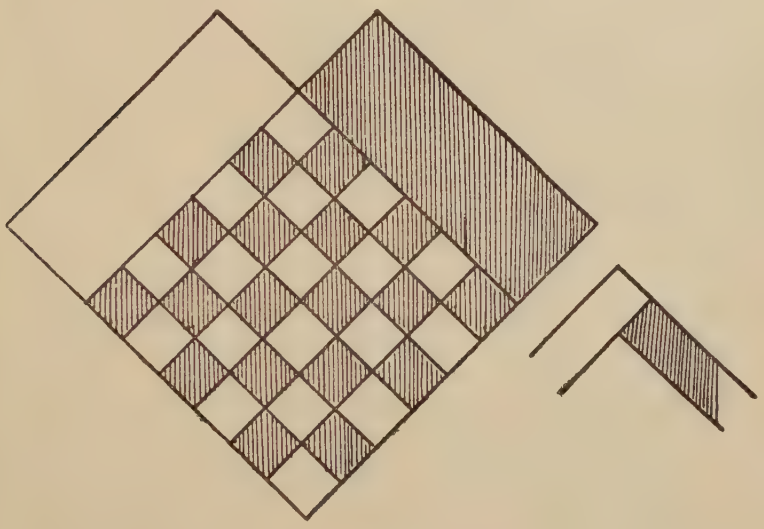


FIG. 21

tines weave the basket and cut the top heart-shaped. Another pretty way is to cut open the bottom point and paste in a small, stiff cardboard disk for a bottom so that the basket may stand well.

Another May basket is made by combining paper folding with tissue paper decoration. From strong paper cut an eight-inch square, fold diameters and diagonals, fold all four corners to the center and crease hard. Now fold back the corners from the center to the outside folded edge, turn paper over, fold all four corners to the center, then turn back these inner corners

to the edge. Now pinch up the thick outer corners on the diagonal fold so that the basket opens, the four lower points serving as a flat base; sharpen the folds a little to emphasize the shape. To decorate, cover the upper and lower corners with fancy paper, cut several thicknesses of tissue paper about three inches wide and plait up lengthwise; cut into fringe right through the plaits to within half an inch of the edge. This makes a crinkled fringe which is pasted around to fill in the space between the upper and lower points. The handle is braided tissue paper. These make pretty bonbonieres or lunch favors.

Paper Box Toys. Among the most practical of the temporary toys are those made from pasteboard boxes. These stand considerable wear. A number of small boxes exactly alike were taken into class and the pupils given an opportunity to show originality in transforming these into toys. The illustration on the opposite page shows the result. The wheels of the go-cart are button molds; large buttons might also be used. Attractive cottages may be made, discarding the box cover and adding pointed ends for the gables, while corrugated pasteboard, used so largely for protection in shipping bottles, etc., makes a good roof, suggesting tiling. A hole cut in the roof admits the chimney. The inside of the cover of a much larger box makes the yard to be laid out as taste directs. The edge forms the wall or fence.

There are boxes, often holding druggist's supplies, which are put together with a fancy strip of bright tin over the corners. These, if of proper size, make the finest of cook stoves. The box stands on the cover, to the top corners of which it is sewed; oven doors are cut, with shoe buttons punched in for knobs. The top of the cover forms the bottom of the oven; holes are cut in the top, an oval tube for the stovepipe of stiff paper fits into a similarly shaped hole in the stove; covers are cut of pasteboard a little larger than the stove holes, and a common button-fastener cautiously straightened out makes a neat little lifter. The box may be blackened with shoe dressing and re-

FURNITURE MADE FROM PAPER BOXES. DISHES OF LEATHER AND TIN FOIL

sponds with a fine shine. One nurse remarked in the Saturday class, "Regular Saturday job, blacking the cook stove."

A square box cut as in the illustration makes the dining table, a pound candy box the cupboard. Dishes may be made of tiny scraps of kid or thin leather, cut perhaps from an old shoe. For this one must mark and cut a perfect disk, using spools of different sizes for guides. Be careful to cut them perfectly round without angles. Lay these flat, face down, upon a hot stove cover. In a few seconds they will puff up in the center, while the edges will be permanently drawn in to form a shapely bowl or plate. They must be closely watched and taken off very quickly.

Clothespin Dolls may be very cleverly costumed. The overall children, the Puritans and, in fact, all sorts of noted characters may be produced by dressing clothespins in paper. Dolls of string tied first like a tassel, then dividing off arms and legs and braiding hair. Rag dolls a nurse should always know how to make; more will be said of these in the old ladies' lesson. The book, "Lady Hollyhock and Her Daughter; or, A Book of Nature Dolls," is an inspiration; written by Margaret Coulson Walker; published by Baker and Taylor, New York.

Eggshells. From eggshells one may make pitchers, baskets, cradles, dishes, boats, etc. The eggs should be broken only at one end and a small hole is necessary, but they need not be blown for most articles.

For a pitcher, cut carefully around the top or small end, cutting down in a broad point on one side for the nose. The cutting must be done with great care, and a pair of manicure scissors held with the convex side towards the eggshell will be found useful. If the shell is fresh it will cut much better than when old and dry. Bind the top edge with a narrow strip of pasted paper; cut a triangular piece and apply to form the nose, which should be pinched up as applied. Another stouter piece of several thicknesses forms the handle, and several little fluffy tissue mats form a sort of nest which suggests a doily; in this put a liberal

amount of paste and set the pitcher in to harden. This makes it stand upright. Very charming decorations may be had by cutting out the tiniest flowers and designs from bits of calico or chintz and pasting on the shells. The illustration opposite page 132 shows the cradle and basket also.

Fruit and Vegetable Animals. Many of the animals made from vegetables and fruits described in Chapter VIII will be useful in this case. Ideas will come from all sides for this lesson. The things which one used to do as a little child and had almost forgotten are revived. The magic of something made from nothing has power to stimulate the child's wonder at what seems to him actual creation.

Cork and Pin Furniture. Select a rather thin cork, cover it with a bit of cloth, ribbon or velvet, just as a button mold is covered. Stick into this quite firmly some common or fancy-headed pins to form the back of a chair. Weave around these pins worsted, string or thread of almost any sort to form a close back. A patient was given a small box of black-headed pins to make some of these chairs; she used up the pins, then covered the box neatly with velvet and, using this for a seat, made a sofa in the same way. The four legs are connected by a continuous thread, woven around from pin to pin for a little depth to form a neat finish.

On no one case would all of these suggestions be employed, but given a few well-learned principles any appreciative nurse will quickly apply these to whatever material she may find. Wherever one turns some contribution waits. And what does it all amount to to the little child emerging from his pneumonia? He remembers a strange, new sense of pressure on his chest, but with this troubled memory comes another—a new world which came little by little into his sick-room. Queer dollies danced for him, stories covered dingy walls, houses were built on his very bed; suppers were served in fine style and, as the weight on his chest lightened, more jolly things happened. Best of all, somebody, who seemed to be able to bring about all these things, was happy with him.

CHAPTER V

RESTRICTED POSITIONS

Among the large number of cases treated by orthopedic appliances are found children suffering for months and years with hip disease or that tubercular affection known as Pott's disease and resulting in the so-called hunchback. Under modern methods much of the serious deformity arising from these conditions is not only greatly modified but, in many instances, completely overcome. To bring about this great end, however, severe treatment must often be instituted and the child strapped with great firmness to an inflexible frame. This frame is usually made of gas pipe, a little larger than the whole body. This lies upon a firm bed and holds its occupant in a truly iron grip. In spite of all this the child may lead a happy and far from useless life. The arms and hands are entirely free and also the head in a large number of cases. In some, however, the head also is grasped by auxiliary apparatus. Only during acute conditions is this most rigorous treatment continued, but it may last for a long period.

In addition to these diseases one must include in the studies for restricted positions all those of traumatic origin, as fracture of femur, etc. In a case of accident one may find both femur and left radius or humerus fractured. This will mean at best six or eight weeks of strict fixation. In a large majority of cases the trouble is local and the patient is like an animal caught in a trap. Here, indeed, occupation treatment is of paramount importance. Happiness and contentment will certainly prove conducive to rest, and absolute rest is the foremost condition of recovery.

With such a case there is no propping up in the ordinary sense. An incline of the whole frame or bed on which the patient

rests is sometimes permitted and in some cases the head may be propped to a considerable angle; but it will be readily seen that in order to do effective work under these circumstances a properly adjusted inclined desk must be obtained. The illustration shows one of simplest construction made by the hospital engineer, which might possibly be produced by the nurse herself. Fitted over the patient's body at an incline arranged for best vision much work may be made possible. Suppose this to be the case of a girl of twelve years or more. Although there may be no real poverty there is sure to be the inevitable strain of a long and tedious illness. For this reason it has seemed wise to consider in this lesson the making of such articles as shall possess a certain market value. Even a little money earned by such a patient seems worthy of consideration in offsetting the financial strain.

Rake Knitting. One of the best forms of work for such a subject is the sort of knitting known as rake-work. This is done on a wooden rake which may be made in various sizes. There is a patent rake made by The Polypus Knitter Company, New York City, and sold at Isaac Allen's, Winter Street, Boston, Massachusetts. The price is seventy-five cents. The actual cost would be very little if some friend who could use tools could make it.

In a strip of wood fifteen and one-half inches long by three-fourths of an inch wide bore twenty holes the size of a large lead pencil; these should be three-sixteenths of an inch apart. In these holes set as many wooden pegs or teeth, cut one and three-quarter inches long. These may be made from a piece of dowel. In one instance, where this was not readily obtained, the pegs were made from penny pencils. On these rakes may be made afghans both for children's carriages and couches; snug little jackets are also made which are very warm. For a child's carriage robe one pound of eightfold Germantown wool will be needed. Only heavy wool is suited to this work.

To knit, tie a loop and slip over the first peg, then wind

around each peg, being careful that the straight thread running between the pegs is always kept on the same side of the rake, never crossing between the pegs. (Fig. 22.) Turn, and wind

FIG. 22

back again, observing the same rule, the straight thread running exactly above the first; turn, and begin to wind back in the same way, but as you wind, having three on each peg, pick up the lowest stitch of the three and pull it up and over the two above and over the top of the peg. A common knitting needle is best to pick it up with. In this way continue, always slipping the lowest loop over the two upper ones. This constitutes the entire process, except as the required length is reached for the strip all the double loops are slipped off and crocheted across to prevent raveling. Three strips the width of the rake make the afghan. Crochet these together and put on border or fringe as one likes. Extra wool will be required for the fringe. The robe may be lined with thin silk. The wool costs two dollars and a quarter per pound. The afghan sells readily for five.

The Hug-me-tight Jacket is made in the same way. A strip the width of the rake and the length of the back from collar to waist line is first knitted. Knit a second strip the width of the rake and the length of the underarm seam. Take the stitches off four pegs on one side, on a string, temporarily. Continue knitting until you reach the outer tip of the shoulder, which will be about fifteen rows. You have on your rake sixteen stitches; these should now be reduced to ten, which is one-half of those on the back piece. Beginning at the shoulder end carefully slip the first two on to the next peg, making four on the peg; repeat this on the next two pegs, after which slip the first four up one peg. Proceed in this way until you have only ten

pegs in use. Knit off these double stitches by slipping the under *two* over the upper two. When across turn and knit back to next the last peg; leave this and return; omit one on the shoulder end every alternate row until all are knit, and you have a triangular gore, or yoke, on the shoulder and ten stitches on the rake. Slip off carefully and crochet or sew to the ten on one side of the back. Make the second front in the same way and join to the other side of back and underarm. Bind the edge with ribbon and run ribbon around waist line. Tie in front, crochet scallop around armholes and waist. This rake-work is wonderfully adaptable to limited powers.

Cloth Animals. In all the toy stores much is made of stuffed cloth animals. These are turned out in large numbers by factories and command a very good price. Perhaps no toys are better loved than are these. Children will cling to a dilapidated elephant or pussy cat to the discarding of all more elegant toys. How many babies go to sleep hugging these favorites! One little boy who was himself a rather hot child insisted on hugging an old disreputable "Jumbo" so large and warm that his mother had to steal it away after he was fast asleep each night to prevent too profuse perspiration. Long after this same child was in school and the elephant's head torn off save an inch or two, he was still cherished. Arriving one day while the boy was in school, his aunt picked up the poor beast, mended his neck and put on a smart red leather collar to cover the scar. In less than two minutes after the boy's return he had pounced upon Jumbo and rushed off with him to shut himself into the parlor. After a time he emerged, and stole up to whisper in his aunt's ear, "While we were in the parlor Jummy asked me to thank you for the stitches you put into him." A certain lawyer has never been willing to part with his Canton flannel elephant, but keeps him in his den.

To buy these animals requires considerable money. It is not easy to obtain the patterns of many; elephant, dog, rabbit and possibly a few others may be bought at the various pattern stores,

but it is quite possible to take from these finer store animals a pattern without injury to the toy. This is done by carefully stretching thin cotton cloth and basting closely to the seams of the model; this is best done with an overhand stitch. One part at a time is covered and cut around, allowing for a quarter-inch seam, then clipping the stitches. In this way take each part. One-half the piece is sufficient to take in parts which are to be cut folded. The best material is usually Canton flannel or, in some cases, shaggy cloaking. Many expensive models are made of velveteen. In cutting out be sure that the nap runs the right way. Bits of faded pink ribbon or silk make the lining for the ears. Shoe buttons, nail-heads, beads, or black-headed pins may be used for eyes. The whiskers are made from the bristles from an old floor brush threaded into a needle and sewed in. Baste the parts carefully and closely, allowing seams never less than an eighth of an inch deep; stitch by machine and turn. If of some size, it will be best to slip some sticks into the legs, as this prevents the bend near the body. For a large elephant broomsticks may be sawed and used. The cotton stuffing should be packed around the sticks. A pair of surgical dressing forceps will be found very useful in stuffing the smaller parts. One of the class triumphs was a pair of real tusks made for the big elephant from the handles of two old toothbrushes, made by the engineer with a hack saw. Holes were bored by which they were sewed to the head.

The stripes and mottlings can be made with paint brush and ink or other color, but one should remember that it is the habit of the infant to put toys headfirst into the mouth, and therefore it will not do to use harmful paints. One baby insisted upon sucking a camel's head all through whooping cough, but strange to say the camel never whooped once. To make these animals well requires certain practice, but many an invalid has earned a good sum in this way. Of course the machine work must be done by the nurse. These animals should always be stuffed hard. The amount of cotton consumed by an elephant is truly great. One non-ambitious patient for whom the broom-

stick legs had been provided decided to use but one, letting the other three legs go singularly limp, as was indeed the entire beast. She gave as a reason that she didn't feel very strong, but strove to make up the deficiency in legs by a much bedizened blanket. Any healthy child would surely have reduced this animal to flatness in a brief space of time. Among the animals turned out by the class were dogs, cats, rabbits, hares, elephants, pigs and bears.

Rag Dolls of many varieties are included in this lesson, as also in some of the others. The double-headed topsy-turvys, white and black, always sell well. This idea took root in the hospital one winter. One patient, unable for a long time to earn money, began making these. Long after she was discharged she returned, reporting that she had made and sold five hundred. To make these, two separate dolls as far as the waist line are made and stuffed; they are then sewed together around the waist, not flattened. The arms are made separate and stuffed only in hand and forearm, the upper arms being left entirely limp. These are then attached to the body and readily fall when the doll is inverted. The dress skirt is long enough to cover completely the lower doll. This is made double, of two kinds of material, one gay and conspicuous for the Dinah, the other of dainty, light goods for the white dolly. The Dinah wears a turban, the other doll a pretty sunbonnet.

The little dolls from the stores may be dressed wholly in crocheted clothing. Every piece of one suit began with thirty stitches. Cunning little boy-dolls were dressed in red silkateen crocheted trousers and blouse. A little red union suit was first made, a cap of Harvard crimson was set on the yellow Dutch-cut hair, and a white H on the red sleeve. Two very dainty little walking dolls from Paris were dressed in these crocheted dresses and jackets, with charming little flappy brim hats to match. Fine split zephyr is best for these suits.

The quaint little Nut Dolls, made from a roll of cloth to the top of which is fastened a hickory nut with pointed nose, may

be dressed as old-time nurses or as nice old ladies in black silk gowns, caps and kerchiefs. The nut is fastened by binding a strip of cotton over the nut and sewing it to either side of the doll. One clever woman always clipped a little white hair from the family cat to serve for the locks of these old ladies.

There is always a good sale for doll's clothing if well made. The dolls from the stores come in a definite scale of sizes. If clothes are made by these they will be sure to fit.

Weaving. Any rectangular frame may be turned into a simple hand-loom by driving in small brads, or wire nails, very near together, across the top of opposite ends. On these the warp is stretched as tightly as possible. This may be of thread, silk, cotton, linen, wool, raffia or, in fact, anything which may be woven. The filling may be even more varied, as no strength is

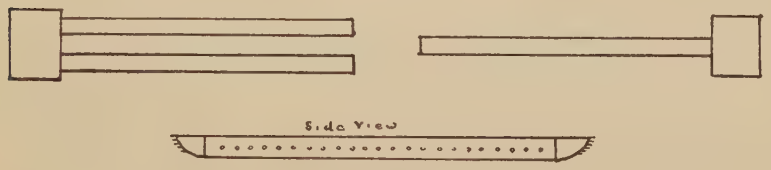


Fig. 23

here required. On these little looms one may weave rugs for doll houses and all sorts of mats, working out varied designs and color schemes. One thing which has to be constantly guarded against is the drawing in of the middle of the warp, making the rug hourglass shape rather than a true square or oblong. To overcome this tendency long knitting needles are sometimes placed at the sides and woven over with the outside warp threads, to be withdrawn when the work is finished; but even then constant vigilance is necessary to prevent the pulling in. The best and altogether satisfactory contrivance for this is made of two strips of wood, long and narrow and dove-tailing in the center. This is called the temple. (Fig. 23.) In both middle and side strips holes are bored exactly opposite, and as the middle strip is slipped in to the required length two pegs are slipped through. Sharp

wire nails on the end prick through and stretch the cloth. The holes must correspond in all three strips.

A good deal of interest has been shown in the weaving of little raffia bags over a cardboard frame. A long strip of thin cardboard perhaps eight by five inches is punched across either end, with holes set very closely together. Through these the warp is threaded, keeping the strands all on one side. When filled the cardboard is folded across the center so that the holes come exactly opposite. Now add to one end just one extra strand half the length of the others to give an uneven number. Begin

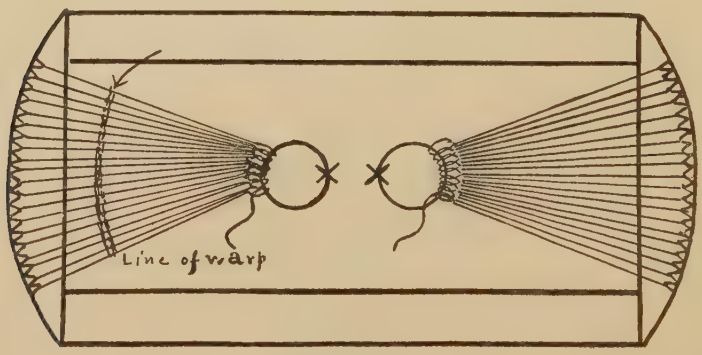


FIG. 24

to weave at the bottom, weaving right around the doubled card, working in any stripe or pattern desired; fill closely to the top and fasten. Now cut the board out and a neat bag results. This may be finished by a buttonhole stitch around the top and two handles worked over with the same stitch. In all this weaving a large tape or ribbon needle may be used in place of a shuttle. In the looms a straight stick the size of a lead pencil may be laid across the warp threads and attached to each alternate strand by a sort of coarse buttonhole stitch done with string around both strand and stick. This stick is pushed up to the top and slipped down after every few threads of filling are put in to act as a reed to bat the work up closely.

Doll's Hammock. A clever method of weaving a doll's hammock is to cut from a pasteboard box, as, for instance, a tailor's box, an oblong measuring perhaps twelve by nine and one-half inches. Round each end as shown in Figure 24, and cut the notches one-quarter of an inch apart; this gives thirty-five notches with an inch and one-quarter border on each side left unnotched. At the points × and × sew two brass rings. Using a ball of very strong, colored twine, begin by tying it to one ring, leaving a half yard or so free end. From this knot carry the ball end up to the outer notch on the same side, straight down on the other side to the outer notch on the other end, over this and up to the second ring. Previous to this another three-quarters of a yard free twine should have been cut and tied to this second ring. With these two free ends, one at either ring, the warp, running from ring to notches and to second ring, is buttonholed or crocheted to the ring. By this means it is not necessary to draw the real warp through the ring, but merely turn it and take the stitch through with the free cord. In this way the warp is all put on, passing through each notch and terminating at the last ring. The weaving is done beginning on the side of the rings, and about two inches from the notches; it is simple in and out weaving, a ribbon needle being used as a shuttle. Continue across the entire back and over the second end to match the first. When complete clip the stitches, holding the rings to the board, and remove the board, leaving a hammock ready to hang up. The line on the sides is a guide in keeping the filling from drawing in, and it is easier to leave a loop of the cord to form a loop fringe at each turn. Various patterns may be introduced. As the weaving goes on the tension on the warp becomes greater, so that the pasteboard curves; but this proves an advantage, as the warp is thus kept taut. There seems to be no reason why more elaborate weaving of small pieces may not be done in this same way. Using wool for filling, a very close, even weave results, which looks not unlike the Navajo blankets. These, it will be remembered, are woven on a still simpler loom

consisting of two sticks, the upper held by the ends in a pair of forked sticks stuck in the ground, the lower weighted with stones.

Scrapbooks of various kinds belong in this lesson, but will be described in the later lesson on home bookbinding.

Penwipers. Describing a few only among the countless numbers, the Black Cat Balls will come first. Cut two disks of pasteboard marked by the top of a teacup and cut out the centers, leaving a rim about three-fourths of an inch wide. Place these two pasteboard rings together. Take one skein of black Germantown wool, cut it right through once and wind the whole skein together over the rings so as to completely cover and fill the entire central space. It will be found easier to pull the last of the skein through with a crochet or button hook. When crowded full, clip through the wool on the outside of the ring right around. Now with a strong, black shoe lacing tie very tightly between the two rings, which must be pressed slightly apart. Tear out the rings, leaving a rough ball hanging by the shoe lacing. Clip this to a very even ball. From double-faced or heavy ribbon cut two black ears; sew these deep down among the wool. Roll up a bit of pink ribbon for a nose and sew in also. Stick two black-headed pins through two amber glass beads and stick into the ball for eyes. From a soft floor brush cut white bristles, tie in little bunches and fasten with glue deep down among the wool for whiskers and eye-whiskers. Last replace the shoe lacing ends by an orange ribbon to hang up by. Calico, Maltese and other cats are made in the same way.

Candle Penwiper. With fine wool, or silk, make a chain of fourteen stitches, join; in short crochet stitch pick up each stitch in the chain, increasing in every alternate stitch, *i. e.*, make two stitches in every other chain stitch. Continue in this way until you have a mat the size of a teacup in seven pie-shaped gores. Now begin in the center and crochet in each stitch around the hole. Continue up without increasing for one and one-half inches, then with white wool, or silk, continue to form the candle as high as desired; narrow off at the top and close entirely. In-

sert a black thread wick in top. Make a scallop border around the mat, and also where the white candle begins. This forms the cup for the stick. Roll a strip of note paper just the length of the candle and large enough to fill the inside; slip it up into the candle from the bottom; cut two or three disks of chamois a trifle smaller than the mat and fasten to the bottom of the mat. Crochet or buttonhole over a small brass ring with the color of the stick and add a row of white and sew edgewise to the candlestick for a handle.

Turtle Penwiper. For these save English walnut shells in perfect halves. Bore four small holes near the edge to sew through. Paint the outside to simulate a turtle shell, varnish; cut head, tail and legs of black, thick cloth and sew to a mat of cloth, then sew on the shell; fasten chamois leaves underneath.

Picture Frames. Many picture frames cut from pasteboard and covered with one layer of sheet wadding and then with thin leather, silk, cretonne or other materials were included in this lesson. The silk frames were decorated with ribbon work embroidery; fine rococo ribbon is threaded directly into a small darning needle and the flower pattern produced by sewing with the ribbon alone. Beads and nail-heads also were used in decorating suède leather frames. A piece of transparent celluloid is used in place of glass and a pasteboard back a trifle smaller than the frame glued on, leaving an opening at the top for slipping in the picture. Rings were used to hang the frame by or a standard of stiff pasteboard attached.

The decorating of paper charlotte russe cases for luncheons affords profitable work. These cases cost only a few cents a dozen, and give great opportunity for dainty device and color.

The possibilities of this lesson are very great, and new suggestions will always be welcome.

CHAPTER VI

IN QUARANTINE

No nurse who has had the care of a child through scarlet fever can feel that she can afford to set aside anything which offers help or suggestion for those long, distracting hours, days, and weeks when, no longer ill, the child feels keenly his restrictions and behaves accordingly. Her only defense will consist in the fertility of her resources.

How may this period be made one of pleasure and profit to both nurse and patient? In considering the work for contagious cases two leading principles have been allowed to dominate. In the first the aim has been to employ no material which may not be completely destroyed, but, at the same time, to teach with this destructible material an indestructible principle. The child then comes out of quarantine the richer for the time spent in seclusion. The second aim is to find such materials as will stand the test of complete and satisfactory disinfection, so that the products may be disposed of without suspicion.

Paper Cutting is, of course, one of the mainstays of this period. A word as to the kind of paper best suited to this purpose may be of service. If one attempts to buy colored paper it almost certainly results in a collection of strong, rather crude colors; if, on the other hand, an assortment of colored waste paper be made, a wholly different effect may be obtained. Papers from bundles, backs of catalogues, envelopes, common tissue, the green wax paper from the florists, ordinary white wax paper, colored magazine covers, nothing is discarded. Take all this collection and arrange, carefully putting all the blues together, the greens, and so forth. When this color-box is ready select some rather simple picture to reproduce. In this lesson it has been the custom to distribute post cards chosen for the purpose. These

THE ORIGINAL POST CARD

CUT–PAPER REPRODUCTION

Page 58

are copied in enlarged form in the cut paper picture. In this reproduction no color is applied, as paint or any other medium, save the papers. No drawing or tracing is done. Only scissors and paste are used. The results have been truly charming and far more attractive than the model. A pale blue, plain paper is pasted evenly to cover perhaps two-thirds the depth of the whole foundation surface, which is of common light paper. From white tissue tear out cloud forms, never cut these; apply paste only to those spots where you wish to indicate shadow. Arrange the clouds on the blue. If still water is to be represented arrange the landscape somewhat double, the second forms being inverted; cover the lower half with wax paper, thus obtaining a softened effect for the reflections in the water. Of very great value are the printed colors found even in the cheapest pictures. A piece clipped from a colored fashion plate will sometimes give just the needed tint. No printed figures are cut from pictures, but the color is made to serve all ends.

The value of this paper cutting has been proved to be much greater than was at first supposed. Distances are managed, perspective constantly taught. The overlaying of closely related tones brings a surprising pleasure to those not familiar with color values. Form is, of course, constantly required. The elimination of detail, together with the preservation of beauty of form and color, teaches much fine discrimination. A new satisfaction has been experienced since this work has been carried on in the recognition of its value preparatory to the use of water colors and other paints. The student who has never painted, and believes herself unable to do so, will handle color far differently after learning how to get good effects in paper.

In this lesson wall decoration on a large scale has been taken up in planning friezes for a child's room. Aside from those mentioned in the first lesson, certain *motifs* have been repeated. A strip of pale gray-blue paper pasted to a lower one a third the width of the first is the background for a long procession of galleys cut all alike from white paper. To do this a large

sheet of white paper is folded to the size of one galley, which is drawn on the upper fold. This outline is then traced with a dressmaker's tracing wheel straight through the several folds of paper, which are then easily cut and pasted to the blue paper sea. This idea may be developed to almost any extent—a caravan, the "Song of Hiawatha," historical events, a city street with all its shops. Any child may be carried miles away from his troubles in this way.

A good play may be enjoyed by stretching a line across the bed and on it hanging a long row of paper Christmas stockings. These may be made of common brown paper trimmed as fancy dictates. Cut with the long fold of the paper up the back of the stocking. The front and foot may be shaped and cut with flaps to turn in and paste. These being designed one for each member of the family, suitable gifts of paper are made to fill each stocking. One needs to husband the supplies in a long case. There can be no prodigality of entertainment; but, given a keen sense of resources, the time may all be well filled.

Papier–Maché. In order to teach modeling *papier-maché* has been introduced. This seems better than modelene or clay because capable of more complete destruction. Costing nothing whatever, this material lends itself well to contagious work and is moreover made by the patient. It is possible to buy from the paper mills at Holyoke, Massachusetts, paper pulp at six cents per pound. After trying this it was found to be more interesting to attempt the whole process and make the pulp. Newspapers were first used. Tear these into reasonably small bits, pour on boiling water and leave to soak over night or several hours. Turn all into a stout cloth and wring very dry, twisting as you wring. This breaks the fiber still more. Take a small lump of this on a board and, with a table fork, scrape it up into fine flakes. Make some thin paste of flour and water, well boiled, and add to the prepared paper, mixing and rolling as if it were dough. It is now ready to be applied to any forms. Simple shapes are best. Glass sauce dishes, smooth bowls, etc.,

will work well. No form which is smaller at the top than anywhere below can be used. Before applying, dip the dish in melted paraffine to coat the outside evenly and prevent the pulp from sticking. Apply the pulp quite thickly and evenly and allow to dry. A little paste on the hand as it models will help the form. The bowl will require a day or two to dry thoroughly. It will then slip off the mold readily and may be decorated with water color. These vessels are very tough, but will not stand water unless protected by strong coats of varnish.

Pleasing effects were gained by using old, soiled blotting paper instead of newspaper. A sheet of gray and one of blue were used mixed, and decorated in indigo pattern. The ink on the blotter grays the color and is a help. It has been well suggested that a little "Easy Dye" be added to the water in which the paper soaks, as in this way all tones may be obtained. The most recent experiment, however, is to use the colored pages of the Sunday papers together with the others. This color slips off and mixes to form neutral greens and blues. Artistic nut bowls and reproductions of old Mexican pottery may readily be made.

Tape Belts. Anything which may be boiled may be safely sent out from quarantine. Many a patient will be interested in braiding belts of linen tape. To make these, eight even lengths of tape about three yards long and one-fourth of an inch wide will be required. Using a pillow from the bed, pin the first two strands to the pillow, as is shown in Figure 25, weaving them over and under until eight strands have been used. Now fold the outer strands back and weave back. Repeat on alternate sides until the belt is of the required length, being careful to turn the tape so as to preserve a straight edge on both sides. When the weaving is completed, unpin and finish the ends by turning in the tape even with the weaving to form a point, then sew down. Being careful not to stretch, stitch one row of machine stitching to hold the edge firmly. These are desirable belts for wash dresses and launder well. At an exhibit

given by this school, where everything was displayed on open tables, this belt proved too great an attraction for one visitor and was slyly spirited away never to be returned.

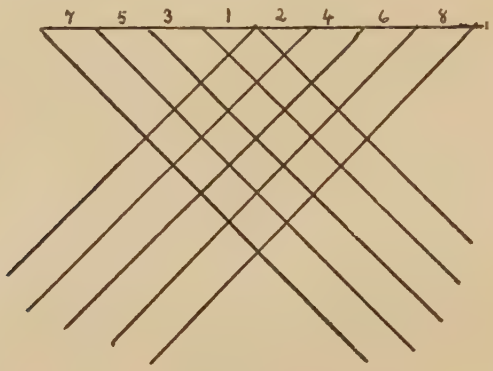


Fig. 25

Metal Work. The well-known fact that bacteria do not choose inorganic substances for propagating beds places metal work in the list of legitimate quarantine occupations. This metal may be thin thirty-four gauge brass or German silver. The design is traced directly on the metal by using carbon paper. The brass should then be tacked rather closely to a smooth board and the design outlined by a line of fine holes pierced by an awl or even a large darning needle. A light tap with a small hammer or mallet is all that is required. If the surface of the brass be dressed over very lightly with vaseline or other oil, it will pierce even more readily, hand pressure alone often being sufficient. After the design is outlined, the entire background is likewise filled in with small holes. There are one or two precautionary words needed. In tacking to the board remember the tendency of metal to "crawl" when worked, and therefore place the tacks rather closely. Be careful not to pierce the holes too near together, as it will then crack. And above all, in this, as in all other work for invalids, do not permit interest in the work to allow eyestrain. Sometimes parts of the work which

might prove such a strain to the patient may be done by the nurse while the former follows on with less exacting work.

The necessary materials for putting these articles together may be found at the larger hardware stores, and consist of small brass shanks made by the Dennison Company, Boston, and claw-feet for jardinières, fern dishes, etc. The candle shades are finished with a bead fringe put on with the shanks. The brass may be polished either before or after tooling. If ordinary metal polish is used after tooling, it must be scrubbed off and out of the holes by strong soapsuds and a brush, and rinsed in very hot water, otherwise polish lodges in the holes and soon turns the brass green. One of the best methods of polishing is by using steel wool. This needs no subsequent washing, but rubbing off with a dry cloth or chamois.

Various other small tools are sold at these stores for working in other ways than by piercing, as repoussé, etc. These articles may be rendered entirely sterile by heat. Designs are found in the newspapers, and they are also on sale at these same stores. Among many poor ones there is here and there a very good one.

Sealing Wax. Obviously a thing which may be made in a flame of fire can be safely sent out of quarantine. The use of sealing wax in making hatpins, fancy clasp pins, buckles and many other articles will prove really profitable. Another thing which recommends this work is that it may be done entirely by candle flame, the light best tolerated by oversensitive eyes. Even a measles case could bear a little of this. The first requirement is a foundation. A penny hatpin, a cheap and otherwise useless belt buckle, old cast-off metal ornaments, all form the best of foundations. Next, a stick of coarse commercial sealing wax will be needed, and last a few colors of the finer sealing wax used for letters. Holding the pin in the left hand, the coarse wax in the right, melt the wax over the candle and apply as it melts to the pinhead. Repeat this until a sufficient amount is deposited for the required shape. In a few seconds it will be cool enough to shape with the fingers into all sorts of forms. When

the shape has been determined, go over the surface with little dabs of the finer wax in any color scheme suggested. This finer wax should not be applied so as to cover the coarser wax entirely, as this is accomplished by heating. This heating is done very cautiously, the pin being turned constantly. Be careful not to heat clear through or the wax may fall off the head. Should the accident occur, remember that this wax may be remelted and applied again. This accident may sometimes be averted when threatening by dipping the pin quickly into cold water. If this is done, be very sure to dry thoroughly before reheating, or blisters may form. In coating buckles, beautiful effects may be obtained by covering first with the coarse wax and then applying the colors. It is thus possible, with little cost, to make buckles to match hats or gowns. It takes a considerable blow to break these, but should this happen it requires only a little more heating and reshaping to make them as good as new. Passing them very quickly across the flame gives the final polish. If a candle is used, do not let any melted candle grease or smoke touch the pin, as this dulls and darkens the wax and it will not then polish. If gas or alcohol flame be used there is danger of too rapid heating, but there is less smoke. Taken altogether gas gives, perhaps, the best results. Interesting Venetian beads are made over the "Job's Tears" purchased at the druggist's. A wooden toothpick stuck through the hole to prevent its filling with wax is removed later.

Paper–bag Masks. For some inexplainable reason a grotesque face or mask nearly always appeals to a boy. An interesting article on the making of paper-bag masks appeared in *The Ladies' Home Journal* for October, 1907. The author of this contribution, Miss Lina Beard, suggests that from large bags, both of the simple pillowslip sort and also those having a plait at the bottom, the various masks representing animals' heads may be made. The features are coarsely drawn in ink with a large brush. The owl, cat, lion, rabbit, fish, seal and various others are made with little cutting. The eyes and nostrils pro-

vide breathing space and the bag is slipped over the head of the wearer. These are readily available for amateur theatricals and require only a suggestion of costume beside. The owl was effectively worn by a member of the school and, with gray flannelette pajamas, made as good an impression as any character present.

The problem of suitable occupation for tuberculous patients, the output being free from all cause for suspicion, has been considered. It was stated by Dr. Farrand, of New York City, that after long study of these cases it had been found that the rest treatment had been overdone and that patients did better when given carefully regulated employment. This may properly be discussed in this chapter. Although such patients cannot be said to be under strict quarantine, still they are subject to many of the same rules.

In the Brookline, Massachusetts, Day Camp for Tuberculous Children the demand for work was met by lessons in sewing. Each little girl dressed a doll and later applied the principles so learned to her own wardrobe. This form of work was chosen because the superintendent felt herself qualified to teach it. The boys and girls also made baskets, the girls using rope and raffia, the boys reed and raffia. The question was raised as to the desirability of a form of occupation which tended to constrict the chest. It seems rational that work on large, plain surfaces should be substituted as far as possible. Consumptive women have a propensity to stoop, sew and cough. Blackboard drawing or crayola work done on a good-sized easel suggests itself; also stenciling on wash goods. It was noted with surprise that book-binding was included in the work of these tuberculous patients which was recently exhibited in New York. It has been found very difficult to dispose of baskets made by such patients, even after formaldehyde disinfection: how much more so to dispose of books, the most impossible objects of disinfection.

An industry long since out of fashion was suggested by a

college professor who remembered that in his home there was formerly a rectangular frame set closely on all four sides with small nails or brads. Running from these was wound coarse, white knitting cotton, first from end to end, then from side to side alternately until nearly two balls were used. No diagonal strands were permitted. When all wound, more cotton threaded in a large darning needle was used to tie at each crossing by a half-buttonhole stitch, first one way and then the other, so that the work was solidly fastened. It was then cut from the nails and the edge trimmed to form a fringelike border. This forms a very thick, open-meshed table mat which may be boiled without harm and used without concern.

Experiments in home dyeing are worth considering in this connection. Nearly all fabrics are better colored if the dye is boiled in, thus disinfecting the work. The "Easy Dyes" are examples of both hot and cold methods. Common white paper may be dyed any desired shade, also raffia, jute, wools, etc. There is a fine opportunity for chemical experiment for one who can collect vegetable material for dyeing. Barks, roots, woods, leaves, fruits and nuts will all yield valuable colors if properly treated. One boy did a piece of rich illuminating with the purple of cooked blueberry juice. To perfect this industry needs long and careful study, but there are many helps. Apply, for instance, to some old lady in the country who dyes carpet rags independently of ready-made dyes, and you will be apt to get many a valuable suggestion. Chemical experiment appeals more readily, as a rule, to boys than to girls, although both will appreciate results in color. Best of all the patient is kept out of doors by this employment.

CHAPTER VII

ONE-HAND LESSONS

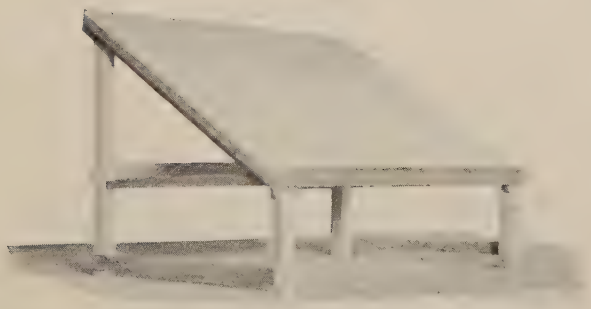
Far more numerous than was at first supposed when this course of instruction was planned are the subjects having but one hand available for work. Fracture, paralysis, deformity, burns, wounds of all sorts leading up many times to amputation, may bring us face to face with the problem of what may be done with one hand unassisted, or aided only to a very limited extent, by the other, if other there be. At the Industrial School for Crippled Children in Boston, good work has been done along this line. Here it has been found that clay modeling possesses advantages in that any hand, even a single remaining finger or deformed little stump, may be used as a sort of tool to which the plastic clay responds and invites further experiment. A child having a deformed hand usually tries to hide it, thus allowing it to become more and more useless. By developing it in this way the owner gains not only confidence, but experiences actual pride in the results and a sense of mastery of his queer little tool. The hands shown in the illustration showed examples of remarkable dexterity. Pointing to the little hooks the patient said, "This one turns all my hems; this one takes the dirt out of all the corners," and so on, finding a peculiar fitness even in the deformity itself. Exquisite needlework, knitting and brass work, to say nothing of excellent housekeeping, were among the accomplishments of this patient.

Any one by persistent practice may learn to use left hand for right. The next thing is to find means for supplying the assistance normally given by the less active hand. With the left hand one ordinarily grasps whatever his right hand finds to do; in lieu of this one may use a vise, a sewing bird, hand screws or clamps of various nature. In every case the rigid principle to be observed

is that the work be *firmly fixed*. If the patient be in bed the frame desk already described in the chapter on restricted positions and shown in the illustration on the opposite page may be used. Embroidery frames may be fastened to the arm of an invalid's chair. A good, firm, resisting surface must be provided, and this surface must be arranged at such an angle as to give the least possible disturbance of vision. If the patient's head can be propped up, so much the better; still, there are cases where a strict horizontal position must be maintained —a fracture of femur and left radius, for example, or a case requiring a collar brace, as in torticollis. The thing to be remembered is that there is always some way which may be devised.

Brush work of all sorts is applicable to these cases. The fact that the patient has never painted and declares that she "cannot even draw a straight line" need in no way hinder the instruction. Any one can learn to draw, although not all may become artists. Teach the simple principle of free-hand pencil drawing. Do not omit to use some color. There is peculiar charm in a little color used correctly. Japanese water color paints in book form may be bought for seventy-five cents; these are perfectly transparent and are therefore adapted to coloring prints and photographs where only flat washes are required and all the shading preserved in the print. These colors are very economical, lasting a long time. They are exceedingly strong, and are on paper instead of being in cakes or tubes. One needs only to clip a tiny scrap, which, when floated in water, sheds its tint to be used as a delicate wash. Directions are given with these little books. In the case of photographs having a shiny surface a little wash of sizing which is to be had for a nickel prepares the surface for the color. This sizing is spread on paper, as is the color. In selecting kodak pictures or prints for coloring it is better to choose those which are lightly printed. Often a print too pale to be of much value uncolored will color very successfully. Magazine illustrations picked up here and there take on new significance when so tinted.

Pointing to the little hooks the patient said, "This one turns all my hems; this one takes the dirt out of all the corners." *Page 67*



BED–DESK *Page 48*

Illuminated mottoes attract much attention. The outlines for these in black and white may be bought at the various school supply places. Some of the very best are printed at the Valhall Studios, 339 Halsey Street, Brooklyn, New York. Fred Rust's Crafts Shop, Evanston, Illinois, and Cheney and Carmichael, Minneapolis, Minnesota, also supply them. Great neatness should be observed in illuminating. A paste may be used to raise capital letters and other parts. Gold and silver paint are effectively employed. There is good sale for these mottoes. Beginning with these simple printed designs the student may gradually work up to doing little things on bits of vellum or parchment, which is the ideal ground for illuminations. There is a stiff kind of oil paper which is sometimes found between layers of bonbons; this is semi-translucent and resembles vellum in appearance. This has been found to take both ink and water color very well. A little manual of illumination is supplied by the Valhall Studio, at the address already given.

Dinner cards will always bring a good price if daintily executed. A single little figure brings from thirty-five to fifty cents. Linen finish Bristol board makes a good card. The design, outlined either by tracing with carbon paper or sketched in freehand, is then colored with water color and when perfectly dry outlined with ink. Quaint little figures, animals, flowers and fruits are all suitable subjects. A charming place card for a dinner given to a foreign guest has a stretch of blue sea over which flies one beautiful white sea gull. An odd series is worked out using large, white tape-buttons, those having two large, deep holes side by side, for faces. The button is glued to a card, the body drawn and colored, and the two deep holes each receive a black dot in the center and serve for most expressive eyes. Hats, caps and bonnets are painted over and above the button-face. All sorts of soldiers, sailors and children of all nations are thus represented.

Pastels or colored crayons may be used, the best paper for practice work being the common cartridge paper used for walls.

English crayon paper bought at art supply places is very nice, the rough side being the one to which the color is applied. This costs more than the cartridge paper, and the regular woolly pastel paper is still more expensive and not so well adapted to all pieces of work. All pastels rub off very easily and should be fixed with special pastel fixatif—that used for charcoal drawing will not do—or else they should be at once covered with glass with a passe-partout binding. In pastel work much of the delicate blending of tones is produced by rubbing in lightly with the finger. The finer lines are obtained by using the broken edges of the crayons, which fracture with a touch but lose no value by breakage. A little box, ample for any beginner, can be bought for fifty or sixty cents, and it is always possible to buy separate crayons of any colors not included. Pastels are rich in tone and usually demand a gold frame. Further suggestions will be found in Chapter XIII.

Charcoal and water color used together give a curious and pleasing variation. An effect much like old tapestry may be obtained by treating charcoal paper to a gray coating, applied evenly over the surface by a piece of charcoal rubbed over lengthwise of the entire stick. Next make a strong drawing in charcoal, taking out the lights with a piece of kneaded rubber or artist's gum. Turn the picture face to the easel and wash the whole back freely with charcoal fixatif applied with a broad brush. When dry, turn face towards you and wash the entire surface with cold coffee or a very thin wash of yellow ochre. In applying this wash fill a large brush very full, sweep right across the top of the picture, letting the drops run down, but quickly catch them up by a second brushful applied just below and continue until the surface is evenly washed. Let this dry thoroughly and then color with water color, using strong colors as the picture suggests. The yellow wash gives the appearance of age. These are best framed by a flat black border.

Envelope Sachets. A woman deprived of the use of all but three fingers, and hopelessly bedridden, has found a way to earn

money by painting common envelopes with some flower design, slipping sheet wadding and sachet powder into these and adding a little poem copied by her own hand, or all that remains to her of a hand. For these she finds ready sale. Fixed in a frame and unable to raise either hand to her head, she contrives to use a long-handled pen and paint brush.

Designing Toilets. With practice and a little study many young girls are able to design dainty gowns. Draw carefully the outlines and then color with water colors. A written description, with estimate of amount of goods and probable cost, will increase the value. If possible, have the invalid designer where she can look out into the world of growing things. Here let her find her color schemes. It is said that Worth, the Parisian designer, made a practice of studying the changes on the spring hillsides when planning spring costumes. Let the colors drop into line with the great march of the seasons as told by the trees, the skies, the waters and the birds.

Rake Knitting. There is good ground for believing that the rake-work already described in the second lesson might well be adapted to a one-hand subject. Fixing the rake steadily, there is no reason why this could not be easily knit off with but one hand.

Leather Tooling. If the leather be securely tacked to a board and the board firmly clamped to a support, this form of work offers a great variety of charming products for the one-hand subject. The leather should be of good quality; dressed calf or split cowhide, ooze finish, may be used. This is sold by the square foot at some hardware places, as Chandler and Barber, Summer Street, Boston, and other dealers. If a number of workers can combine to buy a whole skin, which costs several dollars, it will be found to be a great advantage. The design is first traced upon the leather with a hard lead pencil without carbon paper, the leather itself taking the impression. When this is done the lines are all gone over and strengthened with a leather tool, certain parts being rubbed down very hard, giving a good con-

trast with the lighter untooled surface. Between the board and the leather there should be fastened a sheet of tin which helps to emphasize the pattern and prevents its sinking in. Before tooling, the whole upper surface is brushed over lightly with a damp sponge or cloth. On some light leathers this must be done with great care, but on most of that used the water leaves no stain. Sometimes water is applied to parts of the design on the under surface, which enables them to be modeled up more fully. The only really necessary tool is one having one rather broad, spoonlike end, which is used in rubbing down broader spaces, and the other smaller and more pointed end for smaller parts of the design. This tool costs twenty-five cents and may be purchased at the same stores as is the leather. All sorts of pocketbooks, portfolios, bags, frames, book covers, etc., may be thus made. It requires a fairly strong, firm pressure to get the best results. The metal fasteners for pocketbooks may be put on at the leather shops or, if one is to do many, an outfit for this which can easily be used by any one may be had for one dollar. Leather work is among the most satisfactory products; it is durable, beautiful to a high degree, not really expensive and always desirable. Fine colored calf is obtained at W. A. Hall's, 119 Beach Street, Boston, Massachusetts.

Cross-stitch. The problem of any kind of needlework for a one-hand patient was long considered. It was at last demonstrated that a patient lying on her back in bed with one hand wholly useless could do cross-stitch embroidery. Turning the frame already described on page 48, the canvas was stretched across the open back and the patient could then carry out the design. In order that she may thread her own needles a cushion may be tacked to one side of the frame, the needles stuck into this and there threaded. Patterns for cross-stitch may be had on all sides; very desirable ones are issued on single sheets by The Jenny Brooks Company, Salem, Massachusetts. When the design is done on cloth, railroad canvas is basted over, the pattern worked, and when completed the canvas pulled out a few threads

at a time. One nurse shows a beautiful piece of work done in this stitch on white satin with fine Berlin wool. Somewhat less than seventy years ago the pupils of a Canadian private school were taught the stitch but allowed to work only on samplers. One little girl of thirteen was inspired to attempt the reproduction of a Scriptural scene which would much resemble a fine old tapestry. Not permitted to do it in school and required to go early to her bed at home, her only chance was to work at her great task surreptitiously at night, while her sister held the candle for her. By this means she produced a work of great beauty, which is cherished by her daughter and framed in a plain wooden frame made especially for it by the grandfather. Among the countless crude and deplorable efforts constantly found in country houses and county fairs one may often stumble upon a piece of real artistic value done in this old-time stitch.

This jingle, quoted from memory and without knowledge of its source, has amused many who were induced to try the cross-stitch:

"An old and respectable ostrich
Was seized with a wish to do cross-stitch.
'I will cover my eggs and respectable legs
With rugs and with mats,' said the ostrich.
So she went to a friendly red heifer,
And purchased some needles and zephyr,
Some canvas and crash and some burlap for cash,
For 'I don't sell on trust,' said Miss Heifer.
But when casually the ostrich
Remarked that she wished to do cross-stitch,
Miss Red Heifer's smile made her feel that her style
Was obsolete e'en for an ostrich.
Said the heifer: 'My dear Mrs. Ostrich,
Art embroidery now is the boss stitch
(If you'll pardon the slang). I experience a pang
That you wish to revert to the cross-stitch.'
'There's something much *older* than cross-stitch—
'Tis *courtesy,* ma'am,' said the ostrich."

Weaving. Certain kinds of hand weaving may be done in the little loom described in the second lesson, the difference being that for a one-hand patient it is better to place it on its side, weaving up and down instead of from right to left. At the Marblehead Crafts Shop they sometimes offer work to some of the patients of the Children's Island Hospital. Among these were two girls, one using only the right hand, the other only the left. These girls were able to use a large loom together, each managing one side of the weaving.

Several remarkable examples are reported of work done by patients deprived of the use of both hands. A book published by the Riverside Press many years ago, entitled, "The Life of John Carter," by Frederick James Mills, gives a full account, well illustrated, of the work done by John Carter of Coggeshall, England. He was a silk weaver, earning twelve shillings or more a day. He lapsed into rather idle and dissolute habits. Together with some mischievous companions he was attacking a rookery in May, 1836, when in his climb for the birds he reached the height of forty feet and fell to the ground. He never moved hand or foot from that time. The injury was to the fifth, sixth and seventh vertebræ and his death was expected. Contrary to this, however, he lived. He was then only twenty-one. One day, in reading from books loaned him by his friends, he happened upon a little account of a certain Elizabeth Kinning at an asylum in Liverpool, who, having lost the use of her hands, had learned to draw with her mouth. This suggested to him that he might do the same. He began with a slate, then with a piece of paper pinned to the pillow, first with a pencil, then with a brush. By this means he worked up to line drawing for engraving on copper. This was accomplished in three years. He developed this work to great perfection, one of his drawings being kept by Queen Victoria. He used a small, light desk of wood and a lead pencil about four inches long, held firmly between his teeth. A brush dipped in India ink by his attendant was, by a peculiar muscular action of lips and tongue, made free from

superfluous ink and brought to a fine point. He then held it fast in his teeth and drew with great swiftness by the motion of his head. In this way he lived and worked fourteen years. He died June 2, 1850.

To the right spirit every limitation seems to constitute a summons to greater victories.

CHAPTER VIII

THE IMPATIENT BOY

The study of impatience has been much neglected. By a large majority it has been set down as a serious fault if not a major sin. To say that a person is impatient is equivalent to saying that he is irritable; to say that he is irritable is equivalent to saying that his nerves react too rapidly and violently to various stimuli; and to say this is to admit that he exhibits a deviation from the normal and is, therefore, to a given degree, ill. The moment one transfers crossness from the list of faults to the list of symptoms the whole aspect of the case changes. It may not be possible to arrive at full and complete diagnosis, but here, as elsewhere, one may treat symptoms.

The symptom of impatience precludes the long-continued use of special nerve centers and therefore of special sets of muscles. Particularly is this true of the finer groups of muscles. This principle is observed in the kindergarten and lower primary schools on account of undeveloped mental conditions; in the case of older subjects it must be adhered to because of impaired function, if not structural change. To set a little child to making lace would be reprehensible. To expect an impatient boy or other subject to accomplish work requiring finely coördinated movements is equally wrong. But we have another factor to consider, namely, that, while this boy can do nothing intricate, he *must do something*. With his inability to act discriminatingly comes his powerful impulse to *act* at any cost. He cannot painstakingly lay up a building-block wall piece by piece, but he can demolish such a wall at one fell blow. The conditions rendering a subject impatient are many and varied. A nagging and intermittent pain is apt to foster this, while a continued pain, or one increasing in severity, often makes the subject patient. But take

a boy with earache or toothache—who can stand before him? How he hurls his grandmother's poultice across the room and his mother's hot water bottle after it! The only safe treatment for the members of the family to attempt is the absent treatment.

Fortunately for his nurse there are intervals, and these may be used with great tact even unto the lessening and postponement of the next storm. One boy with toothache found his own sedative in cutting out enough paper devils to go all the way around the room. Extensity seems to be a factor in planning occupation for such a patient, large surfaces, long strokes, pushing away from rather than gathering towards one. And then, after all, the boy likes fun, so make him laugh. Bring in some vegetables and fruits, make for these ridiculous faces with pins or buttons, and add toothpick legs and paper tails. Let the onions grin while they weep. Make a row of apple jack-o'-lanterns, lemon pigs, potato turkeys, raisin turtles and carrot cows; line them all up at good range, then give the boy a bean blower and let him shoot every one of them—dead! It will do him a world of good. Make up absurd jingles; let him splash them on paper with ink and brush in big, untidy strokes. Call them street car signs and suggest trades of all sorts to advertise. It sounds large. If he succeeds and keeps this thing up he may turn out an advertiser and earn more money than his medical adviser ever saw.

Boys are attracted by a sleight-of-hand performance. The trick of stencil may be taught here. Let the nurse make the stencil while the boy sleeps or is otherwise engaged. To do this she traces the design on common brown wrapping paper, cuts it out with slim, pointed scissors or with a knife, and then shellacs it on both sides (if on one only it will curl). When dry it is ready to use. On a broad board lay a piece of blotting paper; over this stretch smoothly the surface to be decorated, then let the boy slap on the color or ink. The nurse takes off the stencil and lo, the boy has made a beautiful thing in spite of himself. Beauty with a surprise in it is always charming, and pain has been

charmed away. When the boy feels better he will do this more carefully. Then you may teach him that all sorts of paint may be used—old dried oil colors in tubes (if the tops will not unscrew, heat them for a moment over a candle or gas flame), dry paint in powder; oil rather than water color is preferable. The best fluid medium is made up after this formula: Into a pint bottle put one ounce oil or essence of wintergreen, one ounce acetic acid. Fill up to the *even pint* with spirits of turpentine. Mix the paint to a thin, creamy consistency. Have a stencil brush which is square across the end and use always the end of the brush and not the side. Take up the color and apply the brush *each time* it is dipped to a piece of common pasteboard or strawboard before applying to the stencil. This takes up the superfluous fluid and prevents the color from running under the edge of the stencil. Apply the color with a stippling motion, not with a stroke. Take up the stencil carefully to prevent smooching, and after thorough drying rub a very hot iron over the under side of the goods to make the color set more firmly. The exact consistency of the paint must be learned by practice. The wintergreen and acid make the color bite into the cloth. Almost any surface may be stenciled. This is often done by rubbing crayola or wax crayons over the stencil and then ironing, but this gives a less attractive effect, although it is much easier for little children.

Spatterflies. This clever name was suggested by a patient for the curious and truly beautiful butterflies made so magically with one or two spatters of paint. To do this fold a piece of fairly heavy white paper evenly through the center once; open and on one side only, very close to the crease, dab two or three very tiny specks of paint from tube colors—oils will work best. Now fold back the paper and with a paper-knife or silver table-knife crease down very hard, first along the fold for a short distance and then from the fold outward. Rub down *very hard,* so that only the thinnest possible layer of paint is spread between the papers. Now open and the result will surprise you both as

to blending of colors and beauty of form. It is not possible to duplicate these. The same colors may be used, the blending will always vary; the same strokes may be repeated, the forms will never be reproduced. Mount these on pale gray paper and make a truly beautiful decoration.

Blue Prints made from natural specimens of trees and leaves of various sorts will be a means of real educational pleasure. To make these one needs only a small printing frame, a roll of blue print paper, the leaves and some running water. Lay the leaf on the glass, cover with the paper with the sensitive side towards the glass, and fasten; expose to the direct rays of the sun, usually four or five minutes. Sometimes a much longer period will be required to bring out any detail of veins which will show perfectly in a good print. In northern latitudes it requires more time. In Nova Scotia, recently, a twig of rose-bush was exposed two hours on a fair day, in the sun, before the veins showed in the print. When printed, place in a basin under cold, running water and wash very thoroughly. After this place between two layers of blotting paper to dry. These make beautiful nature-study scrapbooks. The paper may be cut, but the part not in use must be slipped into a book at once away from light. Get the paper out of the package and into place as quickly as possible, as it is spoiled by exposure to light. Cover the roll of paper at once.

Impromptu products always attract children. A tiny Christmas tree was being decorated for an old lady by a thoughtful nurse. A boy in the house at once set to work to make a Santa Claus for the top. The body was quickly rolled up from absorbent cotton kept in shape by red string wound first over each foot like a sandal and so up the leg, the cotton making snowy trousers. The jacket was made from a bit of red bathrobe, with a red leather belt and cap, the last set on a cotton wool head. The cheeks were tinted with red ink, the features marked in black, the nose pinched up of cotton, a fine white beard of cotton and a pipe made from a little brass screwhook, with a drop of black

sealing wax to form the bowl. All that was lacking was the pack. A bit of brown, leather-like cloth formed the bag, and toys cut from colored paper stuck out of its top.

A wishbone Indian is made by applying melted brown sealing wax to the tip for a head. Shape up the face and set two bright beads for eyes before the wax cools. A long feather may also be embedded in the scalp. The feet are made of wax and have large flat soles, so that the Indian stands firmly. The dress is of bright felt and has an under-cape of chamois leather, so that it may be used as a penwiper. One model has this inscription:

"Once I was a wishbone,
Growing in a hen;
Now I am an Indian,
Made to wipe your pen."

Nearly all boys like to play Indians. The pounding out of grain or popcorn in a mortar or bowl affords a chance to work off pent-up feeling. The impulse to grind may be transferred from the boy's teeth to a coffee mill or meat grinder. This may induce perspiration and so hasten the elimination of toxic substance.

The making of a pumpkin lantern is always fascinating employment. A lantern made in the same way from a big red apple supplied with a little red candle will furnish light enough for a child to eat supper by. This is especially useful in cases of weak eyes, as in measles. As one of these burned, the red wax ran out of the grinning mouth and cooled in the shape of a long, red tongue.

Kite making is well worth trying if the boy can be taken out to watch the flight. For this the stock must be light and the tail-weight carefully adjusted. One old doctor in a Connecticut village was distinguished for his kites and would stand for hours at a time in rapt admiration in the midst of a cornfield to watch his treasures in upper air. Surely the story of Franklin and his kite never fails to gain an attentive audience when told to a little boy.

REED, RAFFIA, AND PINE-NEEDLE BASKETS

Page 91

CHAPTER IX

IN THE HOSPITAL

The space allowed the average ward patient is far from magnificent. The law has been obliged to step in to insure even the modest space of nine square feet under and around each bed. The space for the patient's belongings is even smaller. In the majority of general hospitals the clothing in which the patient arrives is quickly bundled up and sent to some clothesroom, there to remain until the discharge of the patient. Sometimes in a ward of nine or ten beds two chests of drawers are provided, one drawer for each patient. In a much larger proportion of wards, however, the only place which the patient can call her own is the tiny drawer in her bedside table. There may be a small shelf under this, and there her personal property is allowed to remain, provided there be no litter about it.

The matter of personal attention is also painfully limited, not from desire but necessity. How much time, you ask, has the overtaxed ward nurse to give to the treatment of her patients by this occupation method? Little enough surely, but while she makes her bed can she not give through word of mouth a new and stimulating suggestion? While she rubs a back or combs hair or performs some of the "strictly necessary" duties of her profession may she not give, perhaps, a more potent remedy than any contained in the ward medicine closet? Convalescence as a rule is not long tolerated in the rush of the hospital service. One not infrequently finds, however, old ulcer cases, long drainage appendicitis cases, a whole sluggish list, any one of which keeps the patient stationary in a ward where everything around her shifts constantly. What shall be offered to these? There are certain dreary occupations presented by the hospital, one of the most miserable being the picking out of resterilized gauze.

If treatment by suggestion means anything, this must indeed fail to bring joy or health in its train. An endless procession of discharging wounds must be the picture presented.

Whatever work we offer in this chapter must be suited to the limitations of the tiny drawer or possibly a paper box on the lower shelf. But how many pretty things these may hold! Let the subject be a young woman. Has she ever crocheted a

Bean Bag? The materials needed are one spool of colored silkateen, cost five cents, and a fine steel crochet hook of the same price. Make a chain of six stitches; join. In long crochet stitch fill the hole as full as it will hold to make a flat circle, joining the first and last stitch to keep an even edge. Chain two and make the second row of long stitch, putting the hook only over the *chain* on the edge, *not* between the long stitches. It will need to have two stitches in nearly every one to increase sufficiently. In this way continue until nine rows have been made and the mat is smooth and flat; then finish off. Make a second mat exactly like the first and crochet the two together with a short stitch, leaving an inch open for filling. Fill, not too full, with dry beans and close up. Finish by crocheting a little scallop border around. Three of these form a set and sell for thirty-five cents each. Piled one upon the other in a neat package tied with pretty ribbon, they make a nice holiday gift.

Chatelaine Pinballs. Sometimes one likes a few pins close at hand. Select two button molds the size of a small watch. Cover these with delicate satin or silk cut a quarter of an inch larger than the mold. Before covering, the satin may be decorated in fine ribbon work. To do this use rococo ribbon; this costs four cents per yard, and may be had in shaded colors. Thread this directly into a fine darning needle and sew the ribbon into the pattern. No stamping is necessary; one stitch makes a petal, another a leaf. It is better to outline the tiny stems in fine green silk. In this way a tiny wreath, a bunch of daisies, a four-leaved clover, etc., may be put in in a few minutes. Now cut several thicknesses of old flannel a shade smaller than the

mold and stitch through and through like a holder. Next sew a band of baby ribbon to match the silk around one of the molds in fine overhand stitching on the outside, leaving enough at each end to tie in a bow when finished. Now press the flannel pad in and, holding the other covered mold on closely, stitch to the other edge of the ribbon. Tie the bow and fasten well, so that the pinball may hang from the ribbon bow when pinned to the waist. Sometimes a dainty row of featherstitch is done on the ribbon after the ball is otherwise finished. These sold readily for thirty cents each.

A Roller Bandage Pincushion. Tear old or new white flannel into strips one and one-half inches wide and wind as a bandage, very tightly. Fasten by a few stitches. Bias flannel should not be used. Cover one end smoothly and neatly with silk or linen, decorating it with an embroidered wreath, eyelet work, or set in a lace medallion. Cover the bottom with plain material. Cover the sides with a dainty ribbon of the exact width and join very neatly. Sew the upper edge of the ribbon to the top of the cushion with a coarse, half-buttonhole stitch of embroidery silk. Cover two brass rings with the same silk in buttonhole stitch and sew to opposite upper sides of the cushion for handles. The pins go in readily between the flannel edges of the roll.

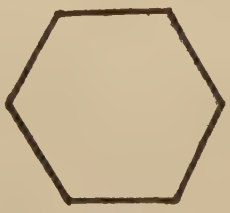


Fig. 26

Lamb's-wool Cushions. These are made by cutting from writing paper seven hexagons the same size as Figure 26. Cover these with dainty Dresden ribbon, if possible of a garland pattern, joined to make it appear continuous. Six should be

covered thus; the seventh forms the center and is best covered with a bit having a tiny bouquet or sprig in the middle or other design which makes a definite pattern. Sew these six pieces all around this center and together down one side by very fine overhand on the wrong side. Around the entire edge sew, on the right side, a strip of ribbon three-eighths of an inch wide. Join with a fine seam. Cut seven more hexagons and cover either like the top or with plain silk for the bottom. Sew this to the second side of the ribbon, leaving an opening for stuffing. Stuff with

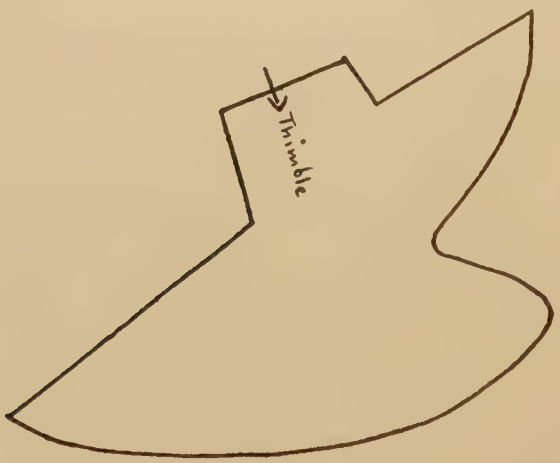


FIG. 27

soft lamb's wool, which may be bought as wadding or from the factory as fine wool, or from the surgical supply places at the rate of two dollars per pound. A pair of dressing forceps is best to stuff with, as this little cushion has many angles and depends on perfect shape for its beauty. Only a little wool is required. When very full, close up. These are dainty and the pins will never rust in them.

A SHAKER BONNET. From light gray felt or broadcloth cut two pieces like the pattern. (Fig. 27.) From delicate pink or blue cashmere cut two more and pink them around the edge.

Place these between the two gray pieces; fasten at back of neck and under chin. Trim with ribbon bows and, last, tuck a white or colored celluloid thimble in the crown to form the headpiece. This makes a charming needlebook. A little doll's face might be added.

Shamrock Needlecase. Cut four pieces of stiff cardboard like the pattern (Fig. 28) and four more of stiff paper. Cover two cardboard and two paper pieces with green silk or satin.

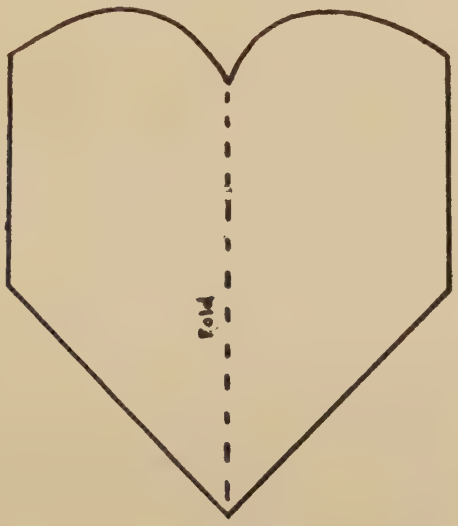


Fig. 28

Cover the other two cardboard and the other two paper sections with a contrasting shade of silk. Sew the four cardboard pieces together, one green and one contrasting shade, making two double pieces. Sew the four paper pieces together in the same way. You now have four double pieces, two stiff and two pliable. Fold these last two straight through the center from the point to the top notch. This makes them appear half pieces. Sew all four pieces together point to point, stiff pieces opposite and flexible pieces with folded edge turned inward. Of course all green sides are outward. In folding, the green side is inward. Sew from

the central point out as far as the first corner in such a way that the two paper sections fold in on either side when the case is closed. Fasten strips of ribbon across inside to hold papers of needles, etc. A little bag for thread may go on one of the stiff sides. Add ribbon ties. When the case is opened it resembles a four-leaved clover.

Black Dinah Emery. Cut two disks of firm cotton cloth two inches in diameter. Stitch these tightly together, leaving a small opening to fill. Fill very hard with emery and press out round. A tiny funnel made of thin sheet brass rolled up will be found of great service in filling. Sew up tightly and cover one side with black silk, bringing it over the seam a quarter of an inch, gathering the edge as in covering a button mold. On this work eyes, nose and mouth in black, red and white silk, or else paint them. Now cut a half-handkerchief piece from gay, soft silk and sew the long side around the seam so that it will turn back, leaving pointed ends at the top. These ends are hemmed, and as the middle point is brought under and nicely arranged these two points are brought together and tied in a genuine bandana knot on the forehead.

Heart-shaped Emery. Another emery which always seems mysterious in its construction is made by measuring a perfect square of two-inch satin ribbon of very firm quality, allowing for a quarter-inch turn in as it is cut. Fold this square diagonally and sew from both *outer* points in a close overhand, leaving a tiny opening a quarter of an inch or so on *one side* of the middle point for filling. Before doing this it is well to baste down the two cut edges very closely. Do not cut off the sewing silk at the opening, but unthread it, and after filling use this rethreaded to close up the seam. This obviates a knot. It should not be possible to detect the place after closing. Before filling, draw the two outer points almost together with double silk, having several threads over which a buttonhole stitch is worked as in making a loop. Insert into the opening the little brass funnel mentioned above and pour in the emery. This requires consider-

able skill. The emery works down into the long points and the ribbon gradually assumes the form shown in Figure 29.

FIG. 29

The emery should be packed in very firmly indeed to give good form. The finger can be worked in around the hole to shape it. If the emery is not firmly packed these outer points will be flabby. When no more can be filled in, sew it up, brush off any emery spilled, and complete by a bow of narrow ribbon tied over the bar. Great care must be used in filling those of delicate color not to spill the emery and so soil the satin.

A FISH PINBALL. From Gloucester, Massachusetts, comes this appropriate souvenir. From a bit of cardboard cut two

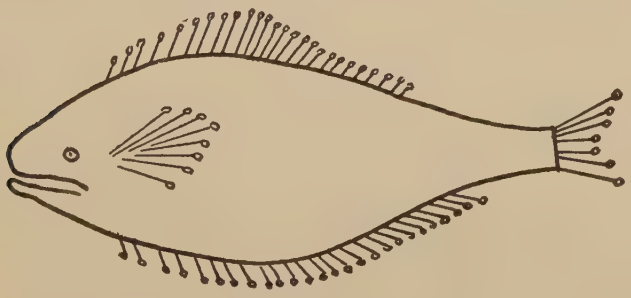


FIG. 30

sections like Figure 30. Cover each neatly with some silk or satin suggesting fish shades. Sew these together; arrange common pins to form the fins. Use a fancy-headed pin for the eye.

Match Boxes. The little sliding match boxes can be daintily covered and used for rubber bands. Many materials may be used, fancy paper, silk, ribbon or linen. A neat design is embroidered or painted on the top. Almost anybody likes a box of rubber bands.

Ribbon Flowers. One of the most attractive and profitable occupations is the making of ribbon flowers for evening wear or for trimming hats or other decoration. This requires a certain knack, but no more than can be learned with a little practice. The materials necessary are a spool of green stem wire, a sheet or two of dark green tissue paper for winding stems, white wire taste, ribbon and foliage.

A Bunch of Violets. One roll of number four violet satin ribbon costing about sixty cents, stem wire, green paper and foliage are needed. Cut one whole spool of wire into six or seven inch lengths. Cut green tissue paper into quarter-inch width strips and wind the wire stems with this, covering completely. Twist firmly at the ends. In covering the stems the paper should not be held at right angles with the wire, but at a long slope. If at right angles much more paper will be used and a thick, clumsy stem will result. With the ribbon make an irregular bow, simply holding without tying and with no knot in the center, the ends and loops being not more than a half-inch long. (Fig. 31.) Pinch up the center and twist over and around it the end of the stem wire, nipping it in tightly and so bringing both ends and loops pointing upward. Hold the ribbon with all four parts of the bow together in the fingers of the left hand as the wire is twisted. In this way continue until the ribbon is used up. In a bunch of violet foliage as purchased there is usually enough for two or more of these bunches. Arrange the violets in a nice bunch and border with leaves. If enough ribbon is provided, tie several bows in the ends of as many irregular lengths and use for a shower to tie up the bunch.

Sweet Peas. Ribbon, pale pink, white or lavender, one and one-quarter inch wide is used. Cut stems and wind as for violets. Cut ribbon into inch and a half lengths, double one end and sew together; turn to form a little hoodlike pocket. Cut the other end in a double scallop; pucker up in the center and twist wire around as for the violets. Cut a few lengths of stem wire, without winding with paper, twist very regularly around a knitting needle for two inches. Slip off this spiral tendril and mix with flowers. Sweet pea foliage is hard to find, but one can usually

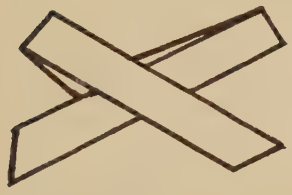


Fig. 31

Fig. 32

find something which may be used, often in shopworn and discarded sprays.

Roses. For large roses two and one-half inch ribbon will be needed, about one yard or a trifle over for a rose. Cut six-inch stems of wire taste, turn one end over the finger to form a loop and twist around. In one end of the ribbon lay several lengthwise plaits for an inch or two and loop over the wire loop, sewing firmly. This forms the center. Now, holding the stem in the left hand and the ribbon in the right, turn the stem so that the ribbon twists slightly towards the right. Loop the ribbon for each petal, turning between each loop and the next, always in the same direction. This turning gives each petal a hollow side towards the center and a convex side outside. Continue in this way, sewing each one as it is formed until the ribbon is used up. The tendency will be to make the petals look like bows and not like rose petals, and also to creep down

the stem. These two things must be guarded against. Push the outer petals up to almost cover the center. Last, wind the stem with green tissue paper, using a little paste at the start around the rose. Rosebuds are made the same except that the ribbon is cut into loops one and a half inch long when doubled. One and one-half inch width is also used. Gather coarsely across the bottom and draw up as shown in Figure 32. This hollows the loop. Roll back the two double corners and catch with an invisible stitch to the petal. Arrange these around a center made as for the rose and having each one overlap the preceding one slightly. Finish with stem paper and arrange roses and buds among rose foliage. The corners of the rose petals may be rolled back in the same way as those of the bud. Another way to make very large roses is to cut petals of silk, sew the edges of two together and turn like a pocket. Put a fine wire inside around the edge and stitch around the petal with corresponding shade of silk. Arrange these around an artificial flower center to form a large, flaring rose. In these the petals may be shaded and form a very rich rose. Small baby roses may be made of narrow ribbon and arranged in wreaths with fine rose foliage.

Another ribbon flower which lacks a name but which has figured largely in Fifth Avenue millinery is made by twisting inch-wide ribbon in two rolls towards each other, thus forming a pointed petal with a crease down the center. These petals are arranged around a covered center in groups of five and so made up into clusters of blossoms. Leaves are made of ribbon with considerable success by using a green picot edge ribbon, half-inch width. Double it for an inch and a half and gather the double edge together on one side; draw it down rather closely and open. This forms the midrib to the leaf, and arranging these as rose leaves the effect is satisfactory. All these bring good prices when well made.

Blackberries. For these a rather heavier wire is used, as black-covered bonnet wire. Cut for stems and on the end sew

a roll of black, soft cloth as a foundation. This should be longer than wide. On this sew black beads, the size of the separate segments of a blackberry, until wholly covered. A bit of brown cambric or cotton is cut for a calyx and fastened to the base of each berry. The blackberry belongs to the rose family, and a few wild rose leaves may be used with them in lieu of their own foliage. These are used on black hats and bonnets, and a bunch shown in a little birch-bark basket has attracted much attention. This leads up to other

Beadwork. It is well known that the savage is charmed by colored beads, and there is still enough of the same spirit remaining in the civilized mind to render them attractive. Beads are strung, woven and sewed upon a foundation of canvas. They may also be strung and knitted or crocheted. It would be a mistake to go into much detailed instruction here when such a wealth of this material may be found in the shops and fancy-work papers. A well-made bead bag easily sells for twelve or fifteen dollars. Bead purses cost less but command good prices; necklaces range from high to low prices and are of almost infinite variety. One fine example of beadwork is a piece done by the Eskimos, showing bead patterns inlaid into hair seal fur. The skin is nicely cut away in a definite pattern and the space perfectly filled with colored beads. Little children often do good work with beads, and the same is true of the blind. One of the best places to buy beads and obtain directions is Isaac D. Allen Company, 21 Winter Street, Boston, Massachusetts. They supply a nice little book on "Apache Bead Work" for twenty-five cents, which is full of instructions. A number of illustrated leaflets showing a great variety of strung necklaces, with prices and instruction, are also sent. In the chapter on work for the blind more will be given on the subject of beadwork.

Basketry. There is a chance for the making of small but dainty baskets by a hospital patient. The only trouble in doing this is the fact that it makes a little more litter, but if properly

carried on lovely baskets may be made. The materials for this are fine reed, number 0 or 1 or 2, colored and uncolored raffia, a raffia needle and a glass of water. All the first named may be obtained at a school supply place, as J. L. Hammett's, Devonshire Street, Boston, or Milton Bradley's, Boston and New York. The colored raffia prepared by various craftspeople is best. It is a mistake to allow these materials to soak any length of time as is sometimes suggested, since they shrink after being made up wet and an irregular basket results. To start, select a reed; whittle one end, as in Figure 33. Moisten slightly. With the

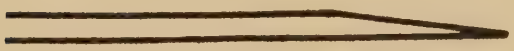


FIG. 33

FIG. 34

desired shade of raffia cover the reed for an inch or so back, allowing the raffia to lie flat and lengthwise and so over the tip. Lead back to the tip and wind upward closely for an inch. Thread this raffia, which has been split and moistened slightly, into a raffia needle. Bend the flexible tip of the reed into a tiny coil and, holding very firmly, sew over and over with the raffia until a close, firm little buttonlike center is made. (Fig. 34.) You may now progress by a number of different basket stitches. The Lazy Squaw Stitch is made by winding the raffia over the outer reed once or twice, then taking a long stitch over the two reeds, the outer and the inner, as in Figure 35.

This stitch lends itself to a great number of patterns. The Knot Stitch or Oatmeal Stitch is much the same except that after

FIG. 35

the long stitch is taken the raffia is brought over *across* this long stitch at right angles *between* the reeds like a back stitch, before going on with the winding between the long stitches. This gives a knotted or grainlike appearance and spreads the reeds somewhat apart, as in Figure 36.

FIG. 36

The third stitch is the Figure of Eight Stitch, and consists in winding the raffia over and under the outer and inner reeds, as the name signifies. It will be best to bring the raffia up from the outside of the inner reed *towards* you, over the outer reed *from* you, up again between the reeds towards you and then down between the inner reed and the one next below. In Figure 37 the two reeds are spread apart to show the method,

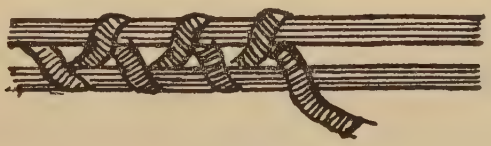


FIG. 37

but in actual work they lie close together, the raffia being tightly drawn and the reeds being really twice covered, as the inner or lower one is always the upper one of the previous pair. The work is very firm and substantial. This is a slow weave, but one of the best and adapted to straight line designs rather than curves, while the Squaw Stitch or Knot Stitch may be used for both sorts of patterns. There are many excellent books on basketry, "Practical Basket Making," by George Wharton James, being one of the best. A bed patient will do well to attempt only small baskets, which seem simply another form of light needle-

work. It is well to learn the stitch thoroughly and to try a simple shape before attempting any pattern.

Crochet in cotton or linen thread is one of the commonest occupations. This is not free from eyestrain and should not be permitted to the point of fatigue. Some patients do this easily; to others it would be a decided strain. To any interested the making of a scrapbook of crochet designs from the various fancywork papers is an especially good work. The patient whose eyes do not admit of the actual work will be able to make a fine collection of designs.

CHAPTER X

GRANDMOTHER

Rarely is there found an old lady who is not anxious to be active. Rheumatism may have a tight clutch upon her, her mind may show plain signs of failing processes, pain may give many a twinge and poor eyesight may exasperate; still, she "sees things to do." Ill fares it with her nurse if she has been brought up to know only her hospital work. What poor opinion the old lady has of a young woman who buys all her underwear ready-made, who never learned to knit! How she despises the nurse who, when her special nursing duties are over, sits down with folded hands or with a novel for her own entertainment! Just because she is herself limited in her activities she wishes to see able-bodied people busy. Sitting beside such an old lady a nurse dressed a doll for her little granddaughter. Long after, when the nurse called, Grandma had no recollection of her face or name, but when the doll was mentioned her face at once lighted. "What," she cried, "were you the one that made the green cape with the pink featherstitching? How nice it looked!" A piece of good mending or a child's garment made from some cast-off grown-up article does such a patient more good than her porous plaster. Let every nurse learn to knit before her graduation. There is a record of one who escaped this—possibly intentionally. Her first case proved to be an old dementia patient who could do nothing but knit. The nurse's postgraduate training had to be along this line.

Another old lady fell downstairs and was put to bed to die. Cherishing a private preference in the matter she declined to depart but waited for her old bones to mend, which process was indifferently accomplished. As she felt herself pulling back into life she thought of no gown of sufficient dignity to grace

her first "sitting up for callers." Day and night she pondered and at last announced her solution of the problem. Being at all times far removed from extravagance she had carefully saved the relics of an old black silk cloak which came within six inches of the required length. How to make good this "all round deficiency" seemed a difficult matter, but no, during all their married life her husband had worn a silk hat for best. Fifty years' hats had been conscientiously stripped of their beaver before dismissal. A goodly roll of these hat strips had waited long for resurrection. Of course, frequent piecing was necessary, but neatly done this added to rather than subtracted from the glory. Then fate turned and the hats gave out on the last six inches in the back. No caller was allowed to leave the room after this without the polite request from Grandma, "Excuse me, but you do not chance to have a gentleman's old silk hat by you, I suppose?" No one had, so at last the gap had to be filled with a piece from the crown, a pinwheel whirl which, though always a problem in brushing, still preserved the integrity of the work as "trimmed wholly with Daniel's hats." To the nurse fell the privilege of making this wondrous gown. As it grew in form and stateliness the glow of satisfaction mounted ever higher in Grandma's soul, and there is no question but that her digestion was improved by this curious plastic operation.

Directions for knitting would, perhaps, be superfluous here, as books and papers teem with them. The really important point is to learn to do it.

As a rule old people will not care to learn new things. They do, however, like new adaptations of old processes. These can go on indefinitely, so that there need be little monotony. Even if the patient be reduced to knitting only facecloths, there are many sorts of these; checkerwork, fancy borders, smooth and rough sides, and the bath towels knitted of linen tape will occupy much time. Absorbent knitting cotton makes a fine bath towel which brings a very good price. This is a German cotton, light, soft and fine. A nurse should learn all these stitches and,

above all, she should learn to pick up dropped stitches, no matter how much they have "run down" or become involved in the pattern.

One of the next best occupations for an old lady is Cross-stitch. Of this much has already been said in the one-hand lesson. Attractive patterns may often be found in carpets, couch covers, wall paper and oilcloth. To take down such a pattern get a sheet of paper ruled in checks or draw crosslines on a piece of ordinary ruled paper. With black and colored ink or pencil check off the pattern, and it is ready then to work from. Patterns worked on plain linens through railroad canvas, which is afterward pulled out thread by thread, are often combined with a drawn-work border. The D. M. C. Library issue good books of design.

Patchwork. Can any one read "Aunt Jane of Kentucky" and sneer at patchwork? Perhaps it seems foolish to a young and vigorous subject, but when stiff and crooked fingers find their exercise therein the sneer changes to admiration. And why may it not be truly beautiful? We pay large sums to have tiled floors laid in patterns; we visit museums to look at mosaics —patchwork, every one. There need be no cutting up of new cloth into pieces to sew together again. Take the scraps, the remnants, put them into feeble hands and let some one sleep the warmer for the work. Very fine examples of patchwork quilts are seen in the South. Golden oranges and green leaves applied to a creamy white ground finely quilted constituted one of these examples. A most pathetic reminder of a clouded mind, or rather one which had never known clearness, was embodied in a box of "patch-scraps" with a great sacking needle still sticking in the work, just as the hand left it to gain through death a new liberty and wider range of activity. This was under the garret eaves of a sweet old Southern home where all the other fingers had been as deft as these were feeble.

A Calendar Quilt. Just a year in the making, this bedspread was conceived and executed by one woman with infinite

pains and careful thought. Composed of twelve large squares, each square a month, each made in its proper month.

January is full of midwinter cheer. Strips of white and silvery gray suggest ice and snow, with some of the greens and red of Christmas left over. All point to a Happy New Year.

February suggests Colonial days. Blue and buff are its colors. Quaint old silks and figured waistcoats; all the old-time finery mustered for the minuet on Washington's Birthday.

St. Patrick is up betimes in March. Yellow and green, with dull blue for the skies, but unmistakable signs of spring withal.

April is fair in lilac and white for Easter. A yellow chick peeps from the center and a rabbit or two peer out.

The Maypole colors in all their spring gayety are gathered in the fifth square. Tender green and Mayflower pink, they all make merry together.

Garlands of roses in Dresden ribbon, with rich greens in yellow sunlight, bring midsummer to the center of the quilt. June holds court surrounded by the months.

To an American July can have but three colors; but the red, white and blue are softened by creamy tints, and it seems like an old silk flag, beautiful in the past as well as in the present.

August speaks of vacation days. The summer girl with her floating silks of dainty shades is there, and one or two of the cravats of the youths about her have found a place.

September is, perhaps, most beautiful of all, the fruit time of the year. Purples many-toned, with yellow of birch leaf and ripening grain; brown leaves and pale autumn skies.

October is lavish of gold of pumpkin and russet of oak. Crimson maple leaves against the late greens. A carnival of color.

November is lovely. Blues and grays, purplish haze with two dashes of golden sunlight across the center.

Last of all comes December, with all the Christmas greens, holly ribbon and scarlet. It is in truth a merry square. Has the time been lost in its making?

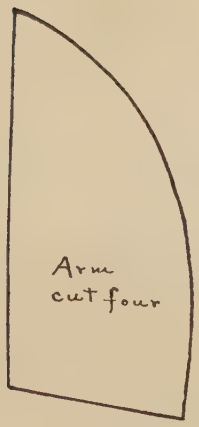


FIG. 38

FIG. 39

FIG. 40

GRANDMOTHER'S CHAIR. How many grandmothers have made these workbox chairs, cut by this pattern? (Figs. 38, 39, and 40.) The seat lifts to form the lid to the box and is stuffed, as is the back, for a cushion. Cut two of each piece from pasteboard, cover with flowery chintz and sew overhand all around each two pieces. Cut two squares the size of the lower line *x*

for bottom of box and two more the size of top line *y* for seat. Then sew them together and see how many will exclaim, "Well, if there isn't one of those chairs such as Grandma used to make!"

A McGinty. Here he sits before you. A droll little figure, made by an old lady of ninety odd years. You will recognize him sitting in the center of the picture on the opposite page, on the edge of the little braided mat. An old stiff linen cuff rolled up and fastened forms his body; over the top is puckered a velvet cap. A little larger velvet bag is sewed over the lower end, after tucking into the cuff a big glass marble, or alley. Funny little flippers of velvet with chamois skin hands are sewed on and little legs and feet to match. A Brownie face is marked with ink on the white cuff. This fellow turns repeated somersaults when started at the top of an inclined plane, as the big alley rolls to the other end of the cuff at each pitch. Sometimes these are called "Brownies," but this grandmother calls hers a "McGinty."

Kitchen Holders may be made in many ways, from the common square or round shapes, neatly bound, to the elaborate chicken. For the last, cut two sections like Figure 41, sew up to form the head and back, stuff the head and, spreading the wings, cut a round or oval piece to fit. Sew this to the sides and bind around with braid. Add black bead eyes and a red flannel comb. Make the bill with yellow thread.

A most desirable holder is made by cutting two flannel squares and putting between them a piece of old leather such as may be cut from the top of an old boot. Cover with cotton or some smooth material. This holder can be much thinner and will not heat through as does a common wool or cotton holder.

Some holders are knitted and some crocheted of colored twine. The roll-like teapot holders are knitted in this way. Using either one or two colors of Germantown yarn, cast on forty-four stitches. Knit back and forth plain until you have four ribs, then knit four stitches plain; then with second shade

See the little Day Star Moving
Life and Time are worth Improving
Seize the Moments While they stay
Seize and Use them
Lest you lose them
And mourn the Wasted day

PRACTICAL SUGGESTIONS FOR AN OLD LADY'S WORK

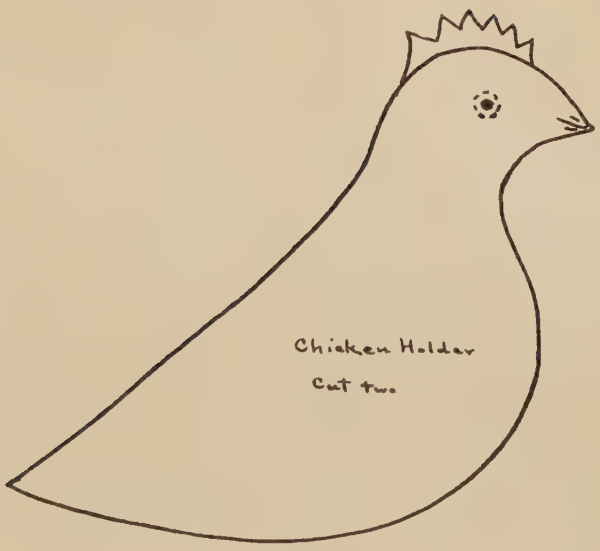


FIG. 41

knit four; now with first thread brought tightly behind the last four stitches knit four more, then four with the first. In this way repeat until you have seven groups of four stitches each, thrown up into puffs by the other thread passing behind tightly. This also makes the holder double. At the last knit four plain for the border. If two shades are used it will make checker work of alternate colors. If only one shade, as corn color, is used, it will have the effect of an ear of corn in long yellow ridges. A green border is pretty in the latter case. When the desired length is reached, knit four ridges like the top for the border and bind off. Now pucker the two ends to form a close roll and finish with a crocheted scallop around the opening. This is intended to fit over the teapot handle.

EGG COZY. Closely related to the teapot holder comes the egg cozy. The pattern (Figs. 42, 43, and 44) shown is from one which came from Surrey, England. It is designed to fit over an egg cup to keep the egg hot for breakfast. This one

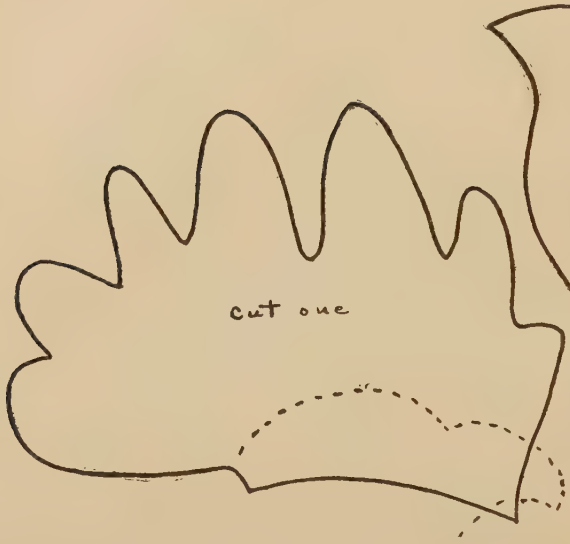


FIG. 42

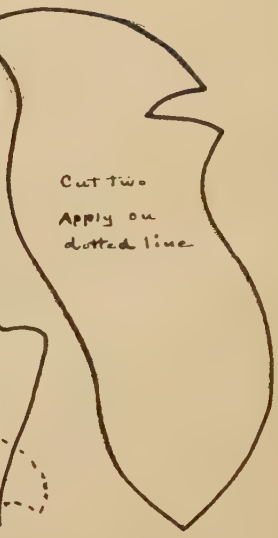


FIG. 43

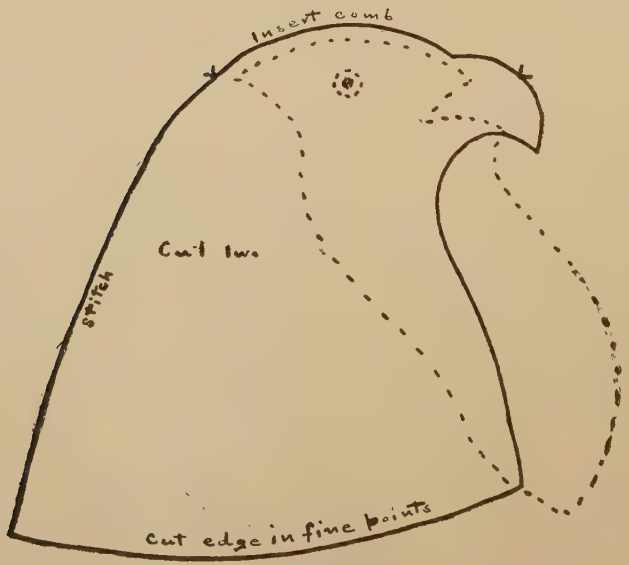


FIG. 44

is made of scarlet and white felt. Cut two of each piece except the comb. Stitch the red wattle to the white neck. Cut a disk of white just large enough to show a ring around the black nail-head eye, which is sewed on before the two halves are stitched together. The comb is inserted between the two sides. The bill is of white, cut in one piece with the neck, but painted to look natural. This chanticleer would grace any invalid's tray and should a collection of various breeds greet our sight on an Easter breakfast table interest would surely be added to the meal.

Rag Dolls. A well-made rag doll does not wait long for a purchaser. Even though she may be put together with few stitches, if cleverly done, the maker will not fail of her reward. One of the most brilliant examples of rag-doll industry has been developed in a suburban town by an old lady who was left a widow some years ago. Much alone and depressed, she was, moreover, almost totally deaf. One day a maid from a neighbor's house came in with a rag doll in her hand and said, "Why don't you make rag dolls?" The suggestion did not strike any responsive chord and the doll was not an attractive one at best. The maid, however, stuck it up on the mantel and left it. After a time another woman came in, and seeing the doll said: "Why, do you make rag dolls? I wish you would make me one to give to my little niece." After she went out the old lady kept looking at the doll and decided to try. She went off by herself and produced her first rag doll. This one sold, another was wanted. The minister called and, knowing he had some little girls, the old lady gave him a package to take home to them. At his next calling place curiosity prevailed and he opened the package to find two dolls. The lady on whom he was then calling at once ordered some. Then a number were sent to a fair. The little daughter of the proprietor of a certain old-fashioned store was there, bought a doll and took it home. The father, seeing it, ordered some for the store and sold a hundred dozen of them. From this their fame has spread. She has made between five and six thousand, sending them, as she

says, all over the world. They sold at first for five cents each, but latterly she has charged ten. They are made from scraps of cloth contributed by friends and stuffed with the clippings. The only expense is the thread with which they are sewed. She has a box for each sort of garment, as hats, shirts, trousers, waists, etc. They are usually sold in pairs, a boy and a girl. The two dolls in the rear of the picture were made by this busy worker.

Another lady has made a rag doll having a true profile. One nurse says that her little niece would never play with an ordinary rag doll because it had no nose. Here this lack is supplied. At first the common flat-faced head is made and stuffed, then a two-piece side section is cut, seamed up the center and stuffed. This is then sewed to the flat face. To avoid a seam up the center of the forehead three pieces may be used, the forehead seaming through the eyebrows. (Fig. 45.) The ink fea-

FIG. 45

tures almost completely conceal the seams. The hair of these dolls is made of raveled out thread or fringe. It may be curled around a hot wire nail. These dolls are wholly of rag. The one shown in the picture carries a white Teddy bear, also made of a bit of woolly rag.

It is a good plan to require a little practice in class in making rag doll faces in ink or paint. One finds that very few strokes are required to give a suggestive countenance. Too much drawing will usually result in too old-looking a face.

Needlebooks. There is no end to the variety of needlebooks. To make the old-fashioned "roll up" a piece of fine kid, bronze preferred, is required. Cut a strip five and one-half inches long by three and one-half wide; cut one end of this in a blunt point. Now roll closely a strip of old and soft flannel four inches wide until you have a roll one inch in diameter. Sew closely together. Cover the two ends of flannel very neatly with velvet, bringing it down over the ends about an inch. Cut a strip of the kid just wide enough to cover the roll, leaving the velvet ends and just long enough to meet exactly around it without overlapping. Bind this all around its four sides with narrow ribbon. About a quarter of an inch from one long side of this piece cut a round hole large enough to allow a thimble to slip in, just midway between the ends. Next make a tiny silk bag the size of the thimble hole, tuck it in and fasten its edge to the edge of the hole cut in the leather and bind both together with the narrow ribbon. Very carefully clip away the flannel roll just opposite this hole to form a case for the thimble. This will cut nearly through the roll and should be deep enough to allow the thimble to sink in entirely. Into this hole press the little silk bag, bring the kid around the roll and sew the bound edges very neatly together. Now line the long kid strip with silk and bind all around with ribbon. Next to the straight end fasten two neat little flannel leaves for the needles. Just beyond, towards the pointed end, sew a little full silk bag with elastic across the top. At the very tip fasten a ribbon in the center, leaving two long ends to go around and tie. Sew the straight, bound end to the seam of the leather covering the roll.

The beauty of a needlebook always seems to consist in its extreme neatness rather than its elaborateness. The plain rectangular book made on cardboard covered with silk or other material, one side being padded for pins and the other for the leaves, is always attractive if exquisitely sewed. Tiny pincushions with cross-stitched tops are always welcome. Those made of colored dress braid of different shades, first sewed

together and then featherstitched down each seam and stuffed with wool, are among the best. The ends are drawn up very tightly and fringed out. A strong stitch through the center from side to side shapes it. Old ladies are very apt to keep such a little cushion on the sill of the window at which they sit.

Flag Penwiper. This is made in red, white and blue silk, worked in cross-stitch or single diagonal stitch on railroad canvas. The design is of an American flag, the pattern having the original thirteen stars. The edges are neatly turned under. It is lined with red silk and, after the penwiper leaves have been attached, is fastened by red ribbon bows to the top of a red lead pencil which serves as stick.

The little panlike Cushions are made by cutting a square bottom of pasteboard and four double sides like Figure 46.

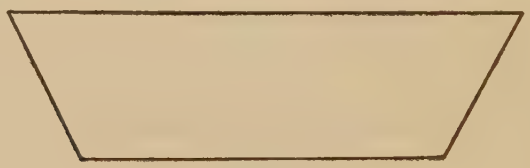


Fig. 46

These are covered with silk and sewed together to form a square basket. This is then filled rounding full of soft wool. Have a square of the silk just the size of the top after the edges are turned in and basted; sew this neatly in overhand around the top. Crochet over two brass rings with silk and attach to opposite sides to form handles.

A good many old ladies with crippled lower extremities are great rug makers. Braided Rugs may be made which are really handsome, one of the newest suggestions being to braid the rug of some neutral tinted goods and then apply a large stencil design, radiating from the center. The color being finely chosen, these are certainly effective. Drawn in or hooked in rugs are more difficult, as they require some stooping. Nothing could

exceed the nicety and true beauty of these rugs as made by the descendants of the returned Acadians on the shores of St. Mary's Bay, Nova Scotia. The French taste here has prevailed over all the monstrosities shown in the county fair types of impossible dogs, etc. Designs of fine block or brick work in choice lines of color, palm leaf patterns almost like fine old cashmere done in beautifully graded tones are a real joy to the eye. Sometimes a delicate scroll or a maple leaf pattern is put in in soft wool and raised above the surface of the background. The even shearing is truly wonderful. This much was learned as an admiring American watched the little French station mistress who, with her eight small daughters about her, none being old enough to share her labors, was augmenting the family exchecker by rug making. A beautiful, even, plushlike surface may be obtained from no finer material than old black cotton stockings. Only a few loops, these being very short, were drawn in at a time and immediately sheared. In the imposing cathedral on this desolate shore these drawn-in rugs are placed before the great crucifix and also before the shrine of St. Anne.

Crocheted rag rugs may also be made, using a large wooden crochet hook and taking pains to tear the strips narrow. Knitted rugs are also acceptable.

A Turkey Feather Fan. A handsome specimen stands near the center of this group. This was made in the South by an old lady and her daughter. The long turkey feathers are sewed in place and fastened to a round stick handle, the downy feathers being used on the lower half. The stick is then covered lengthwise with the needles of the long-leaved pine of the South, which are held in place by weaving a thread in and out, giving it a close resemblance to a turkey's leg. A little netted cap fits over the end. These may be ordered from Mrs. Retta Boykin, Charleston, South Carolina, price one dollar and a half. They are among the most satisfactory fans made.

Scrapbooks. Many old ladies enjoy making scrapbooks. Indeed, this is an occupation suited to all classes of subjects.

Personal recollections, pictures, poetry, designs, recipes—all manner of information is thus made available.

"Sometimes a light surprises" an aged subject, reflected back from the accomplishments of youth. One such instance is shown in a revival of painting by a lady of eighty-two years. Always living near a picturesque shore, she had made many studies of its color. After the death of husband and son she felt that she must try to earn a little money. She bravely got out her old paint box; and, although too feeble to go sketching, she used the snapshots taken by her daughter and painted her beloved shore on bits of modest academy board, selling these at two dollars and a half each. She said that in one year she had earned forty-eight dollars in this way, "and," she added enthusiastically, "if I live long enough I believe I shall learn how to paint!"

CHAPTER XI

THE BUSINESS MAN

Gloomy indeed is the outlook for a man whose interests have been centered in the strong tide of men and affairs, when he finds himself shut in a four-walled space through long convalescence or more tedious chronic conditions. He will care little if at all for the bits of manual work offered to many patients and proving for them sufficient. What can the nurse bring into this limited space, a veritable prison to a man of active habits, which will appeal to him as being worth while?

To build is a strongly developed human instinct. Every man has some definite ideas on this subject, and the building or Planning of a House will make its own appeal. The man has either lived in houses which he feels might be improved or he has some ambitions of his own in the way of building, or will be gratified to have others consult him in planning their house. To be able to plan a house, even of the simplest construction, involves some definite knowledge. This the nurse must gain through reliable sources. A single lecture is given to this end, and various plans presented by the students have proved that many of the essentials have been grasped. Nurses are asked to draw a plan on the scale of one-quarter inch to the foot. Given a twenty-five by forty foot rectangle they allow six inches for all partitions and side walls. The size of the chimney is thirty-eight by eighteen inches. The opening for a fireplace must be twenty-four to twenty-eight inches wide; the mantel four to five feet long. In rooms of twenty feet or less, nine feet is enough for height, reckoning to lower edge of floor beams and adding ten inches for beam and two for flooring. Stairs offer perhaps the greatest problem. Allow seven inches for the rise of steps; the treads should be ten inches wide. The second

story must never be less than eight feet high; preferably eight feet six inches. The width of the stairway should not be less than three and one-half feet. Above the third step from the bottom the upper floor must be cut away for headroom, called the well. It is interesting to see how, given the same size rectangle, different arrangement of rooms may be planned. Some will make the mistake of having the plumbing all on the outside where the pipes are sure to freeze. Others will allow only cramped space for service rooms, closets, etc. Still others will be lavish of fireplaces, ignoring the fact that the least expensive one means fifty dollars. Some will provide a place for the ice to go in outside, thus saving trouble and untidiness within. The first and second floors, a front elevation, drawn without perspective, and, last, a little water color sketch of the whole in perspective, with a suggestion of the grounds, will provide interesting work even though the patient be kept in bed.

Gardening. Very naturally from the house the thoughts are directed to the garden. The joy of planning a garden is pure and refreshing, and man was a gardener before he was a builder. This may be even more practical than the house planning, for even if one cannot build, he may be able to find a bit of the earth to plant. The early experiments may be made in the sick-room itself. Three sorts of house gardening may be tried. First the ordinary window box, with plants which will stand steam or furnace heat. This was tried in the case of one woman who was on the verge of mental break-up, and who felt great fear of everything that suggested responsibility in any form. She also held to a belief that if a plant failed to thrive, a like calamity might overtake her. Great care was taken in planning this box and, at the suggestion of the wise physician, one plant already in bloom was placed in the center and so selected that it proved a perpetual bloomer. A great fondness for this little garden resulted on the part of the patient, together with much pride in its care, while recovery came slowly and surely as the plants grew. Some of the same group of plants are still flourishing

in the room of the once more independent gardener. Another patient was surprised into great pleasure one Christmas morning by a charming window box which had been thoughtfully prepared by her nurse. Genuine affection for this little garden was manifested, and she actually undertook cultivation by stirring the soil with her buttonhook every few days. When the box was borrowed for an exhibition she found it necessary to attend in order to visit her garden. All this would prove of equal interest to a man.

A seed box is a second form of gardening adapted to the house. There is an invitation in every package of seeds to share a great secret—a mystery—who can understand it? Find a long, rather shallow box and fill it with earth which has been finely pulverized; get a toy watering pot and plant your seeds. It is a goodly interest and somehow lays hold of the great truths in life, the elemental wisdom. When the seeds have grown to stout little plants, the potting off into tiny thumbpots may be done as bedside occupation.

A third form of horticulture is the propagating frame. Take a box rather deeper, say twelve to fourteen inches; saw the ends slanting (Fig. 47) to form a one-pitch greenhouse roof, sawing

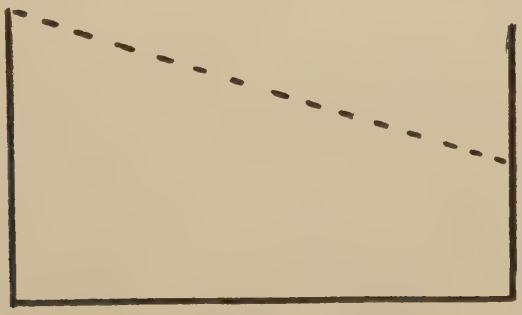


FIG. 47

down the front to the same level. Across the front nail a narrow strip of board and over the top lay window glass to form the sloping roof. The board across the front projects above the top

a trifle, and so prevents the glass from slipping off. Fill the bottom of the box with sand and in this set cuttings of various plants. Many of these may be picked out of the bunches of flowers sent to the patient, a bit of rose geranium or lemon verbena or carnation pipings. Many and varied are the products of this box. When the cuttings have struck root they should be taken up and reset in earth, as the sand affords only temporary nourishment. This box should have some sunlight, as the cuttings will damp off if kept covered in the shade. Especially is this true of common geraniums, which contain much moisture.

So, if fears prevail and days go heavily, start a garden. Bulbs may be tried with interest but do not result in such continued satisfaction as do the earlier forms of gardening suggested. But who can feel that life is stripped of its good or that renewal is not possible as he looks at the green things pushing up towards the sun!

Home Bookbinding. Among all the industries suggested for home execution none appeals more strongly to both the practical and artistic temperament than that of home bookbinding. In this one actually learns a new trade, and this will usually appeal to a man. It is entirely possible to bind books at home far more strongly and often more beautifully than many done in commercial binding. Several different varieties are within the scope of this domestic art. Start first with the

Japanese Binding. This form of binding is peculiarly adapted to kodak books, post card albums, etc., but may be employed for many other purposes. To make a photograph book select a paper which is light rather than heavy. Bond paper is very good. Other papers are the grays and browns having a sort of linen finish and popular for mounting pictures. These are obtained from the wholesale houses at a small price, three to five cents per large sheet, provided a ream, *i. e.*, about five hundred sheets, can be used. If buying for individual orders certain stationers, as Samuel Ward, Franklin Street, Boston, will furnish this large size paper by the sheet. The size of these sheets is twenty-five by twenty inches, or more.

EXAMPLES OF BOOKBINDING WITHOUT TOOLS

These are first carefully folded and creased down with a paper knife to the required width and two-page length, so that you have a piece twice the size of the book folded once on the shorter diameter. Three large sheets will usually fold to make some twenty pages. Carefully pack these up with *all the folded edges together* and all the cut ends together. Be very careful about this. Now cut the light pasteboard for the covers the same length and one-quarter inch wider than the pages. From one end of these two pasteboards carefully measure and cut off a strip one-half inch wide. These four pieces of board, two large and two narrow, must now be covered with any selected material; it may be thin leather, linen, cretonne, Japanese crêpe or anything which pleases. Brush good flour paste over the entire surface of the board and apply the cover, which should be cut a quarter inch larger than the pasteboard. Paste over the edge carefully, making very neat corners. This last will require practice. Clip the material off diagonally at the corners before turning it in, but avoid clipping too closely. The corners should be very exact. The two narrow strips of board are covered likewise.

When this is done cut two strips of leather or kid, it may be from an old long-wrist glove, an inch and a quarter wide; paste the end of one large portion of the cover and one narrow strip and fasten to the leather so that the latter forms a flexible hinge for each cover, one-quarter of an inch space showing between the strip and the cover board. Allow these to dry thoroughly under a weight. When dry, line the large piece of each cover with paper or silk, pasting neatly over the first edge of the strip of leather. When this too is perfectly dry, place the double folded sheets between the two covers, having all the cut ends just even with the edge of the narrow strip of the cover. Tie the whole very tightly around with a string to hold exactly in place. With a five-cent awl and a hammer drive four holes right through leather hinge, paper pages and second leather hinge, the book having been first placed on a board which cannot be hurt by the awl piercing it. These holes should be one inch from top

and bottom and the inner two at equal distance from these and from each other. When well bored take a tape needle threaded with number 1 ribbon and, starting at the first hole, sew through and bring up, leaving two inches of ribbon free end. Turn the long ribbon over the top and back through the same hole, being always careful to keep it flat and smooth. Then bind it tightly around the back and up again through the same hole, leaving the short end free. Now down to, and through, the next hole, around the back, up and down through the same hole, down to the third hole on the back, up, around the back, up through the same hole, down and through the fourth hole, up and around the back and down through the same hole, around the end, up and down through the same hole, up and through the third hole, up and through the second hole, up, and tie in a very tight knot, close to the first hole, with the short end of the ribbon. Cut off the ends, leaving perhaps a scant half inch, and with the awl punch these down into the hole so that no knot can be seen. This completes the binding and makes a book which opens nicely and has the advantage of allowing more leaves to be added simply by unlacing and relacing. Instead of ribbon, double Turk's-head knots of leather thong may be used if the covers be also of leather. One such double knot is in each of the four holes. To tie these proceed as follows: Take two thongs of strong leather five or six inches long, lay them crosswise at right angles and hold by the cross in the left thumb and forefinger. Now take end *A* and fold across end *B*, fold end *B* across *A* and *C*, end *C* across *B* and *D*, end *D* across *C* and through the loop of *A*. Draw all four ends up to form Figure 48. Bring the four ends together and pull them through the hole in the book, leaving the knot on one side. Now tie a second Turk's-head, with the ends close to the top cover and, after drawing up, cut off the ends as indicated by the diagonal dotted lines. (Fig. 49.) A Baby Kodak book made in this way is of light leather with a stork's head tooled in each corner. If the book be for a scrapbook or card album, it is well to cut narrow strips of paper and place between

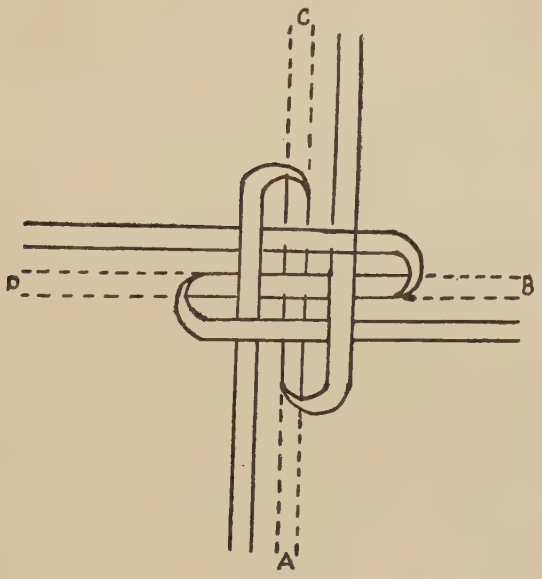


FIG. 48

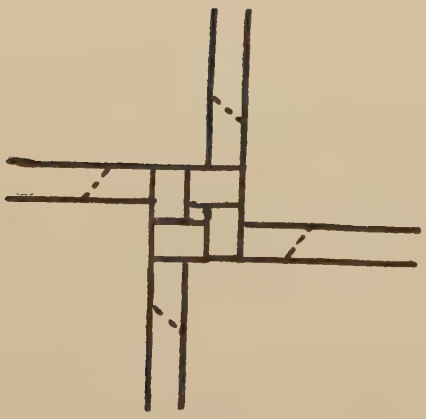


FIG. 49

the leaves to act as guards, binding through all. This sort of binding admits of an almost endless variety of design and material.

French and Hollow-Back Binding. Paper-covered books, magazines, music, etc., may be stitched for binding thus: Carefully separate the sections or signatures, to use a bookbinder's term, and pile in exact order of paging. Any torn places or holes should be repaired by pasting over them bits of thin paper, as onion skin paper. The old paste or glue should be cleaned off. Be sure that the pile is even on the edges. Cut from two to four inch-wide tapes, according to the length of the back of the book; an ordinary book needs two, while music would require three or four. These tapes will be five or six inches long. Holding the pile very firmly, lay a tape across tightly and with a soft pencil mark a strong line on either side of the tape on the back of the sections, being sure that every one is marked. (See cut on page 25.) The tape should lie about two to three inches from the top and the same from the bottom. If a third tape is required, place it directly in the middle. Without using a tape, mark three-fourths of an inch from the top and bottom for another line of sewing. This done, open each section exactly in the middle and pierce with a large needle straight through at each point marked. Replace in pile in exact order. Now cut and fold three plain sheets to form one more section on each side of the book, six sheets in all, folded once through the center and placed together one inside the other. Mark these to correspond with the others and pierce.

In a large needle thread strong linen or silk in a very long double thread without a knot. Taking up the first signature sew from without in through the upper hole, then out next hole; lay the first tape over between the marks and sew down *over* but never *through* this tape. Up and over next tape to bottom, up through the last hole. Fold up this signature and take next; open, place beside first, sew down through first hole, holding it very closely to the first signature, and up over tapes to top, where it is firmly tied to the first ends of thread which have been left two or three inches long. Repeat this process on third signature to bottom, where, to connect them closely, the "kettle stitch" is

made, which consists of a half-buttonhole stitch taken over the preceding stitch between the signatures. This forms a little chainlike band at top and bottom. When all the sections have been sewed, fasten firmly, leaving an inch or so of thread which is tucked in between the signatures. This is also done when it is necessary to take a new thread while sewing.

Now glue the tapes firmly stretched to the outside leaf on both sides. Fold back and cut this leaf off half width. It is well now to wrap the book, leaving these half leaves out, in a temporary paper wrapper or envelope, to prevent soiling as the work goes on. Grasp the book very firmly in the left hand with the back up, and brush over the entire back with flexible glue, which should be vigorously rubbed in with the right forefinger, the firm grasp of the left hand preventing it from running down between the signatures. Over this is laid a strip of muslin or cheese cloth wide enough to cover the back and extend two inches on the side leaves. This is firmly glued down, the end leaves turned up and the book allowed to dry thoroughly. When dry, carefully measure and cut a piece of wrapping paper the exact size of the back and glue it on.

The book is now ready for its covers. From light-weight pasteboard or millboard cut four pieces one-quarter inch longer than the book and just the same width. These are best cut with a knife on a sheet of tin. Now paste the inside of the half sheets and fasten firmly to the two boards, leaving a quarter inch space between the back and the edge of the board to allow for good opening. Brush over the whole outer surface, leaf, board and all, and paste the other two boards so that the end sheet comes between the two thin boards. Put under an even weight until quite dry. If an ordinary letter press is available, use it by all means, but if not, use very heavy books or anything which makes even pressure. In binding very large books it will be hard to find a way to press them. On one occasion a parlor table was turned upside down on the floor and worked admirably.

There is a variety of backs. The French back is made by

gluing the cover cloth directly to the back of the book. The hollow back is a trifle more complicated. For this cut the cloth half an inch larger than will easily wrap the book. Fold and crease exactly down the middle of the back; cut a strip of wrapping paper exactly the length and width of the back of the book and paste down on the cloth over the fold in the back, leaving even space at top and bottom for turning down. Next fold four or five thicknesses of newspaper to the same measure as the strip of paper on the cloth and lay without pasting on top of this strip. This is to protect from paste and to increase space, and is temporary. Brush over the cloth thoroughly and evenly with paste, hold the book with the back pressed firmly down against the newspaper pad and bring the pasted cloth smoothly up to the cover, first on one side, then the other. Rub out every wrinkle and blister with a smooth-edged paper knife, rubbing from back to front. Cut the corners to turn very neatly; if cut too close to the board they will not cover, if too far from it they will look bungling; paste down front and back edges first.

Now set the book up on end, pull out the newspaper pad and clip a quarter of an inch or so down into the little end sheet which shows between the boards and the back on each side. Paste the cloth and tuck the edge into these clipped places, which allow of its being pasted firmly to the back and to the ends of the covers. Repeat on the other end. Lay the book down, and with the paper knife mark strongly the ridge between the edge of the pasteboard and the back to form a groove on either side. Carefully tie a large twine around this groove and over top and bottom, having the knot always at the end and the top and bottom edges of the book which come under the cord turned inward. In this way it is put into the press, the cloth covers being well protected by a perfectly smooth piece of cotton cloth, since any wrinkle or raveling will make its permanent mark on the book. Two pieces of smooth pasteboard may be placed above and below. If paper is used to protect a newly pasted surface it is apt to stick in drying, but cloth peels off easily even though it should

stick a trifle. Let the book stay in the press over night or until thoroughly dry.

In the morning take out, remove cloth, take off twine and open covers *clear back*. In this position spread the first loose sheet with paste and paste down to line the cover. This leaves two new fly leaves. Rub down with a paper knife and do not allow the book to be closed at all until these are dry. This completes the book. The title, however, is a matter of some difficulty. For a paper or cheaply covered book a label might be neatly printed and used, but for a better book other means have been devised. If bound in a leather which admits of tooling, the title is easily done in this way. After the impression has been made with a cold tool, the letters may be brushed over with thin mucilage or gum arabic solution; gold powder is then dusted on which adheres only to the gummed letter and is, when dry, rubbed down to a burnished surface with an agate.

Modifications of these bindings are always possible. A flexible binding suggesting the "Roycroft" is easily done, the book being sewed the same, but a soft ooze leather cover with silk lining being here employed. Half leather bindings, back and corners of leather and the rest of fine paper or cloth, are made practically in the same way as the hollow back. Portfolios, letter cases, magazine covers and many other booklike conveniences are modeled on the same principles.

There is an interesting experiment to be worked out for book or portfolio covers in coarse water color paper. This is first washed over with a light, leather colored water color wash. To apply this mix a fairly generous amount of the color in *plenty* of water. Use a large brush and sweep quickly across the top of the paper; dip the brush again and make a second sweep, picking up the drops which are running down from the first application. In the same way go over the entire surface, never brushing back and forth or in spots. When this is thoroughly dry, draw whatever design or title is desired and color as taste suggests. Now, with a piece of yellow beeswax, slightly warm,

go over the whole surface. Last, rub this down well with the bare thumb. This makes a surface so closely resembling pigskin as to deceive the very elect.

Block Printing. The study of textiles is worthy of a larger place in private consideration than is commonly awarded. Weaving, designing, coloring, printing, all these interests are involved in a carpet or hanging. The hand-printed Java cottons are prized highly. There is no reason why equal merit may not be bestowed on fabrics printed in one's own home. Almost any one can learn to make a good block. It is well to discriminate among woods a little. To get the best results a wood of medium hardness only and of comparatively fine grain will be chosen. Perhaps the best is the sweet gum of the Southern states. This may be obtained at the cabinet makers' or wherever Sloyd stock is kept. It is, however, by no means necessary, and good blocks are made from white wood, sycamore and many other woods. In elementary grades the children cut blocks on bottle corks, which, of course, are easily cut but usually print unevenly, owing to the irregular taking up of paint. A very good block may be cut from a thick, even slice of raw sweet potato. This dries in time, but if kept moist will work very well. Good blocks may be cut on the ends of common spools, leaving the other end for a handle. The design here must be chosen so that the hole in the center comes in the space around the design.

To make a block one first decides upon the design, which is traced upon thin paper and closely pasted to the surface of the block. It is well to have the block only a trifle larger than the design and to have the edges of uniform width, as it is an aid in printing. With a pocketknife or, if obtainable, a Sloyd knife, cut down all around the outline, allowing the paper to remain on. Next to this the space between the lines is scooped out, not requiring special smoothing, but taken out so as to leave the design raised and clear of surrounding surface, the design being left perfectly level. The wood surrounding the design on the edges is also scooped out so that when the block is pressed

face down on any surface the design alone will touch. Avoid choosing designs with very fine lines, especially those which run across the grain.

The paper may now be soaked off. The object in leaving it on during the cutting is twofold; first, to apply the pattern and second, because there is much less danger of splitting if cut through paper. Wood engravers cut on the end of the grain, but either this or the lengthwise surface may be used. There is danger in sandpapering a block that the level surface may be impaired; if cut well there will be little need of this.

You have now a tool, a block which may be used indefinitely in many combinations. This is the superiority which it bears to a stencil pattern. To print, one first needs a perfectly *level* surface, as a broad board. On this spread a half dozen thicknesses of newspaper and cover with blotting paper, tacking securely. On this stretch the fabric to be printed, linen, cotton, silk, etc. The color may be oil, tube paint, dry color, Higgins' inks or even water color. "Easy Dye" may also be used. Oil paint from the tube is mixed with the same medium as that used in stenciling, namely, turpentine with acetic acid and oil of wintergreen, one ounce each of the last two, the remainder of one pint being turpentine. Kerosene even may be used in place of turpentine with very good results. Higgins' inks have been recommended for very delicate fabrics, as chiffons, etc. Water color is least desirable, requiring the mixing with mucilage and spreading on a pad. It is always wise to mix enough color for the whole piece of work at once, it being difficult to match the shades at different mixings.

The colors being ready, the face of the design is now covered, care being taken that the paint is not filled in between the lines of the design. For this purpose make a pad of cotton wool in a hard, smooth ball, covering it with a piece of an old kid glove and tying this around it very tightly so that it will make a perfectly smooth padded surface. Apply the paint to this pad and thence to the block; mix the color quite thick, so that it

may not run down into the block. Now apply the block to the fabric straight downward without possible slide, and press firmly. A block cannot be replaced, as a stencil may be, so that the first imprint must be perfect. Much will depend upon the consistency of the paint. This, however, must be learned by experience. Always test on a sample bit of goods. It is possible to deepen or strengthen the print by touching up with the brush, but this is not strongly recommended. Practice will bring its rewards, and beautiful effects may be obtained. Many good stencil designs are equally applicable for block printing. Fine *motifs* may be obtained from Mexican rugs, couch covers, etc.

Pyrography. In a somewhat limited sense the use of pyrography will be worth encouraging. This is said cautiously, as the market is so flooded with bad products; but employed as a delicate etching might be used, there is much to attract.

A Birthday Cake Board. This consists of a large, round plaque having a double row of holes bored half through, each hole being large enough to admit a cake candle. There is an attractive border illustrating a Mother Goose story. This is very lightly outlined by burning and colored with water color. The central space is left for the cake, which, by this arrangement, need not have its surface marred by sticking in candles. The double row of holes provides for a long series of birthdays. The inner row is close to the cake, the outer near to the extreme edge, while the border fills the space between. The board should be lightly shellacked to prevent grease spots. This board sells for five dollars, but may be made for less than one. When the cake is in place and the candles lighted the effect may be enhanced by adding a few little white mice, made by pinching a rather cheap marshmallow into this shape. Add white paper ears, braided white silk tails, ink eyes and broomstraw whiskers. These are left to dodge in between the candles and forage for the crumbs.

One of the most impressive pieces of invalid work has come in the form of some Miniature Fowls. Two brown Leghorns,

MINIATURE FOWLS

Page 122

cock and hen, and "an old Dominique hen who has lost all her chickens, poor thing!" represent this triumph over adversity by a man laid low by serious accident. This man was a college student who, while tobogganing, received great injury to one leg. For seven or eight years he lay in bed in the hope of saving that leg. During this time he refused to be unemployed and conceived this original way of earning his money. He had living fowls brought to his room, studied their every point and became able to reproduce to wonderful perfection the very breeds before him. The body of the fowl he whittled from wood; next the legs were made from very fine wire and thread, boiled in yellow glue and firmly inserted into the wooden body. The feathering came next, and in this he reached consummate skill. No tiniest shade of color or form was lost; the feathers were applied with flour paste and put on in overlapping rows from tail to head. The tiny bills and eyes are painted, the combs cut from red flannel and adjusted with precisely the right wag. No feature is lacking. These brought a good price; and, although the poor leg had to go in the end, with new apparatus its indomitable owner pushes with success a good business and is relieved of the necessity of making miniature fowls; but all who study these gems, not more than an inch or even less in length, will join with the professor who, when he saw them, said, "Well, that man would win under all circumstances."

It is worth while trying to keep man's work manly. Invalidism does not make it necessary for its subject to become effeminate in effort. Beauty must truly hold sway here as elsewhere, but let there be strength and stability combined, and strive for that appreciated by the healthy subject as well as by the invalid.

CHAPTER XII

WITH WANING POWERS

THERE is little room for doubt that the old man presents the most difficult subject in our study. Just why an old man should be more helpless in finding work adapted to his declining strength than is a woman of the same age is not made plain to us, except for the fact that the average man's work takes him away from home, while the average woman's work, being in the home, is aided by its suggestions. The man comes home to rest. Having done this all his active life, the suggestions are still in that direction, and one's first duty may be to teach the old gentleman that home is also a place for work.

The mistake is sometimes made by affectionate children of saying to an aged parent: "Why, you do not need any money, you are provided for in every way. Don't you have everything you want?" When a person feels that he no longer needs any money his self-respect is surely impaired. It may be little, but that little he surely needs. One wise daughter realized this and provided her bedridden and thoroughly cared for mother with one hundred dollars in cash. This the old lady kept safely between the mattresses and counted unfailingly every night and morning, giving thanks that she was not without personal resources. To the mind of a man much more than to that of a woman this fact of being set off from the financial world is repugnant. It is indeed pathetic to note how an old man prizes a dollar or even less if earned since his forced retirement. This retirement may, of course, be brought about by a great variety of causes. Many times a valvular heart trouble, varying in severity but never disappearing, forbids any but the gentler forms of exercise. Arteriosclerosis, renal affections, with lame backs and periods of acute pain, more or less extensive paralyses

and often just a sense of lessening strength. Perhaps the last is worst of all, the consciousness of growing old. To really *be* old is nothing; to *feel* old makes the hand tremble, the eye dull, the mouth droop. Now find something the old man can still do and see how much pride may be stimulated for a small effort.

What would he like to do best of all? Go back to business, of course. Very well, what was his business? If he has been a carpenter he may be able to make some little thing which involves the employment of a principle learned and used in early activities. The thing he makes may be trivial, a little wooden box, a towel rack, a knife tray. He will take such pride in a neat joint; the very feeling of the tools in his hands fosters renewal of self-respect. Search diligently to find in all trades that which may be carried over into old age.

Old men are often fond of WHITTLING. A group of veterans used to meet daily around a little stove in a store. Their unvarying occupation was whittling. When the next man came in the one before him cut his stick in two and passed half of it on to the latest comer. Little or nothing was said; their ambition seemed to be fulfilled in meeting together regularly and whittling, although they did not make a single thing. Why not turn this whittling tendency to account? Several men have done this by sawing a stick from an elm tree into blocks, leaving the bark on. The center is scooped out and smoothed up and rubbed down with sandpaper and the whole shellacked. These make very convenient napkin rings for summer cottages and camps. A short-breathed old man will not be able to saw, although he may whittle.

The frames made by the Indians of heavy birch bark, punched with holes around the edge through which raffia or grass is laced over a bundle of sweet grass which forms the edge, make good work for one with limited strength. There is, moreover, a very good sale for these.

One delicate invalid took great comfort in BRAIDING STRAW for hats. The straw was obtained from the hat factories in

Milford, Massachusetts. With a glass of water beside him in which to moisten his fingers, he braided large quantities of this useful product. This might easily be managed by a bed patient.

A good deal may be made of man's well-nigh universal interest in the newspapers. A poor wreck, a paralyzed professor, spent many happy hours in making SCRAPBOOKS on various subjects of local historic interest for a public library. This may be worked out along varying lines. Such a compiler becomes of true value to the community. There should be good supervision that no heterogeneous material be collected, but, held to definite subjects, there is room for much valuable work. One old man who had suffered amputation of the tongue as result of cancer was given a quiet place in the top of a studio building, where with great precision he mounted and filed photographs and prints illustrating a series of lectures on the history of art.

In discussing the subject of occupation for men with one enthusiastic professor, he remarked that the only thing which was presented to him as a means of entertainment during slow convalescence from typhoid fever was a bit of string which chanced to hang within his reach. This seems like a truly meager provision, but even this may have its possibilities. Multiply it by two or three and the field widens greatly. The sailor's art of TYING KNOTS is varied and valuable. It affords problems and may be turned to good account on land or sea. A few years ago, when a party visited the receiving ship at Charlestown Navy Yard, an interesting collection was shown by the captain's cook, who had in his chest a fine array of ornaments of black silk and white cord made to decorate the costumes of both sexes. To give directions for the tying of all these knots would be very difficult. To one sufficiently interested the following books will be a great help: "Knotting and Splicing," fifty cents, published by Cassell and Company, New York, and "The Rigger's Guide or Seaman's Assistant," by Charles Bushell, published by Griffin and Company, Portsmouth, England. The directions for two

knots were admirably given in *Harper's Bazaar* for October, 1909. A kind sea captain of Ellsworth, Maine, has generously supplied models to the classes of this school.

A patient in this institution brought a curious little frame on which she made CORDS FOR EYEGLASSES AND WATCHES. (Fig. 50.) She said that an aunt who had lived in the Azores learned the method from a sailor. A slip noose is first tied, leaving the

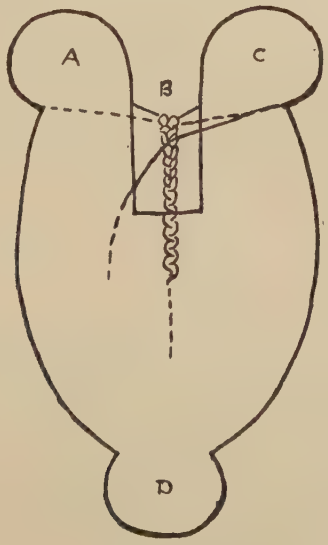


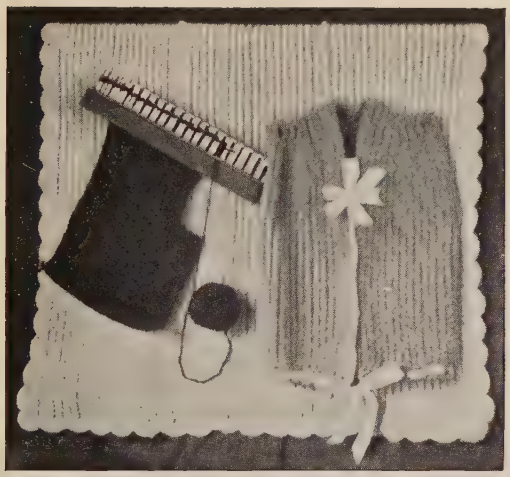
FIG. 50

end a little long; slip this over one side of the frame *A* and, holding the knot in the center *B*, carry the thread around the end *C*, turning the frame in the left hand. The left thumb and finger should hold the thread at *B* all the time. Pull up the lower thread of silk as you turn and slip it over the upper one and over the end; then holding the cord firmly, draw the silk thread very evenly and closely down to the cord. Continue this process until long enough, winding the cord as made around the lower end *D*. These frames are of light wood; if heavier, a large cord could be made for lanyards, curtain pulls, etc.

It is a cord having decided angles and is very handsome when evenly made.

Many old men like to know how to make good stout Baskets. They would not care to fuss with raffia, but a basket of splints or twigs appeals to them. A most beautiful flower basket, which, when filled with red roses, won the first prize at a North Shore flower show, was made in melon shape from the natural brown birch twigs, which were laid side by side and wired together at intervals, gathered up at the ends closely and finished with a handle over the top from end to end. An old French Acadian makes baskets of all sizes from roots which he gathers, cleans and scrapes; the spokes are shaved from heavy splint and the smaller baskets made on the melon pattern, bringing one strong spoke around and joining in an oval, thus forming the mid-spoke and handle all together. To this the side spokes are added and the weaver of scraped roots intertwined. The largest of these baskets is without a handle over the top, but has two openings left at the sides to serve as such. It resembles closely the Scotch "creel." The illustration on the opposite page shows this basket with its royal contents of Nova Scotia water lilies. One interesting basket was made with spokes of reed and a weaver of common blackberry vine. This was yellow and shining and possessed real charm. Another had seaweed used for the weaver and, when dry, showed a beautiful deep purple tone.

There seems to be an instinct in old people for Mending. Perhaps it springs from an unconscious sympathy. Their own bodies are wearing out and they see in a disabled piece of furniture, a broken dish, a battered metal cup or an old lamp something which stimulates effort towards its renewal. There are many examples of old men who seem "possessed" to solder tinware. They stump into the kitchen at unseemly hours and stick a soldering iron into the fire just when it is most needed for broiling. They appear in the living room when a cheerful fire in the grate is inviting some caller to linger and, to the dismay of the hostess, stir up ill-smelling fumes from soldering fluids.



RAKE KNITTING *Page 48*

AN OLD ACADIAN BASKET *Page 128*

They stubbornly refuse to take a walk as ordered by the family physician as an aid to digestion, and persist in soldering some old lamp. But why oppose them? Why not make a place for this? An old man's place is by the fire just as truly as is the cat's. Given a chance much good may come of it. Kitchen ware mended in the house makes for thrift. Agate ware may be soldered as well as tin. One man took great pains to make a nice tin dipper for the school exhibit. He put in a double bottom and added a final touch in a stamped plate bearing his own name and place of residence.

Occasionally an old man is found who likes to darn stockings. Why not? This is only another form of weaving and much hand weaving is done by old men. One rather eccentric old gentleman found his chief interest in darning socks and flying kites of his own construction. In both arts he excelled, save that he darned the socks before they were washed, possibly for economic reasons.

Some old men like to make Rugs, braided or hooked in. If able to weave on a hand loom the sphere widens greatly. Any one can cut the rags and ball them up. There is a trick learned from an old man in making a twisted stripe for weaving which is worth remembering. Take two strips of contrasting colors together; holding the end in the left thumb and forefinger wind up around these and when all wound pull on both ends, *i. e.*, the ends in the left hand and those outside in the right. The result will be a self-twisted stripe.

A German strung rug is made by putting a stout warp on a frame which is of four strips of wood, the end strips being nailed across the side strips so that they are higher as the frame lies on a table. The size of an ordinary door mat is good. Across the end strips drive wire nails close together, leaving an inch standing up above the frame. The warp is stretched back and forth from end to end. The filling may be of rags cut a finger long and a finger wide. Lay such a strip over the first two warp threads and tuck the ends under and pull up through the center.

The next one is put over the inner thread of the first pair and the third warp thread. Continue in this way until the warp is filled and a strong, tufted rug results. The very best of these rugs are made of coir yarn, which is made of cocoanut fiber, and more fully described in the chapter, "Without Sight."

A group of men in fairly comfortable physical condition fell into the habit of gathering by the fire in a hospital sitting room and resting their feet on its best mahogany center table. The suggestion was adopted of providing something for these feet to do, and a foot-power jig saw was placed by the fire and the men interested by the persistent efforts of the head nurse until they fell to making PICTURE PUZZLES. This they did all winter and even into the warmer weather, when the jig saw was moved to the piazza. At the rate that these puzzles sell, namely, a cent a piece, a puzzle of one hundred pieces bringing one dollar, etc., they must have made a very large sum. The whole institution was provided and there were also some to send to other invalids outside.

One soaring soul carried out his ambition to learn lace making at eighty. He had married a woman many years younger than himself and when she attempted this delicate work he followed, nothing daunted, and soon produced a Battenberg bureau scarf which claimed real admiration. Another old man learned to play the fiddle at eighty. This may not seem an occupation, but it is a thing which people want and will often pay for.

A very good suggestion for an old man's work is the making of leather MOCCASINS. If one sends to Mr. William A. Hall, 119 Beach Street, Boston, Massachusetts, he can obtain these all cut and stretched upon any size last. The leathers are of fine quality and color and the work consists in piercing and lacing the moccasins together with leather thongs. The price of the whole will be something less than seventy-five cents.

The training of animals is often undertaken with joy and pride by an old man. Its usefulness may be questioned, but it may be placed alongside of the fiddle. An extreme example

of this is vouched for in the case of an old man whose infirmities were accompanied by great corpulence. He sat in an enormous chair outside the back door in the summer evenings and by a given signal summoned a select company of toads whom he trained to do tricks which, if described, might jeopard the sale of this volume on account of their seeming impossibility.

Strange to say, if left to their own devices, and able to walk far enough, old men often seek old burying grounds and collect epitaphs. The memories awakened are strangely significant. An old man walked with his daughter in such a burial place in the town of his birth, and noting a name on an old stone he exclaimed, "I knew that boy; he slept with me one night, and before he went to bed he ate an apple!" By even such deeds shall the aspirant to fame be remembered.

If only a few fragments of wits remain the old man can sell postage stamps. The fact that he makes no money by no means indicates that he receives no profit. He is a public servant and he feels the little rub of the pennies as they slip into his hands and a faint flicker stirs the old brain paths of finance. He is again in business and his uncertain little life flame is worth tending.

CHAPTER XIII

IN WAITING TIME

THERE is perhaps no more trying period in the experience of a household than the weeks which sometimes intervene between the time of calculated and actual confinement. The time has seemed quite long enough at best, and to have it vaguely extended will have either a depressing or an irritating effect, according to the temperament involved. During this time the nurse is usually in the house, not by any means because she is wanted, but because it is possible that even a worse calamity than that of her presence might be visited upon the family in her absence. In all this there is no personal grudge, but something very closely allied to this is really felt when the question of money is considered. At first this is not so apparent; the first twenty-one or twenty-five dollars does not loom so large; but as it goes on to fifty, seventy-five, one hundred—a whole month gone and nothing has happened! The situation is getting desperate. The husband appeals wildly to medical authority and medical authority shakes its head and smiles. To send the nurse away now seems absurd; to keep her at this rate ruinous. No one prays more devoutly for a fortunate termination to this seemingly interminable period than does this same nurse.

It is the province of every nurse to relieve distressed conditions wherever she may find them. Here is real distress; not of the sort which she was called to relieve, but none the less genuine. Is she equal to the demand? What has her training given her over against this need? It has taught her that she must be cheerful under all circumstances, so she smiles and waits, but her smile and her waiting are alike maddening. It is not enough to say that she is kept from earning her money in active nursing in some other home; she must in some way contrive to earn it right

EGGSHELL TOYS

here. She must know how to treat depression, apprehension, fatigue. If she can effectually handle these most subtle symptoms the husband will pay her and add his hearty thanks.

Depression is successfully treated many times by the stimulation of a new, and preferably involuntary, interest. The voluntary attention of this woman has been intensely focused on the expected event through long preceding months; ready for a culmination which is apparently absent. The attention becomes fatigued; the subject cannot be dismissed, but is gone over and over in wearying procession of thought. The mind, left to itself, drops inevitably into the nine months' groove. The first requirement, then, in treating this case is a *new object of attention.* A new occupation requires a new physical attitude as well as mental. Let a tired body be presented with a piece of work which calls for the exercise of new muscles, of new positions, and overworked muscles rest involuntarily. There is usually a sense of completed preparation which renders the time more irksome. Let the new interest be directed towards a thing which may well cover considerable time and so be itself the subject of interruption. Let nothing in the way of work be despised provided these conditions be fulfilled. To add to an already satisfactory layette is unwise from more than one point of view. There is, however, one sort of extension of this idea which possesses sufficient novelty to make it worth while to attempt a trial. This is the making of toys, and is best, of course, in a heretofore childless home.

Take, for instance, the Stuffed Cloth Animals. Mental depression will retreat as this woman stuffs her first elephant. It takes time and some physical strength to do this and is inevitably funny and a good, wholesome piece of work. It may possibly be in line to say that any possible objection on the part of unscientific minds as to the danger of "marking" an infant by working on such figures may be effectually dispelled by the strong assurance that at this stage all development is far too complete to admit of the remotest danger. This may be considered good,

wholesome work; still, all things considered, the work which opens the way to a distinctly new accomplishment will be best.

Perhaps no better thing than BOOKBINDING could be inaugurated. The patient has never thought of this? So much the better. The materials can be quickly assembled; the directions given in the chapter on "The Business Man" hold good here. Beautiful portfolios, picture frames, letter cases and blotters are made in much the same way as are the covers of a book. Let her bind up some of her old music or her magazines. Gather up the loose kodak pictures, make an album and then color the photographs; the chances are that before all have been arranged in the book it will have to be laid aside for a time until the later sitting up calls it out again.

Has this patient ever learned to use PASTELS? It may be that long ago she took a few lessons in oil painting. This involves the use of certain odorous oils which are many times peculiarly disagreeable to a pregnant woman; pastels, on the contrary, are much more manageable, and so truly charming! One may purchase a little unpainted wooden box marked "France" for about sixty cents. In this is found several rows of delicately tinted crayons carefully laid in fine sawdust and covered with a cotton wool blanket. They break almost with a touch, these precious pastels, but never mind, every fragment may be used; the little fractured edge is just what will serve you best for your finest lines.

A few more explicit directions may be a help. English crayon paper is sold in many tints. This has one smooth side and one slightly rough. This will work better than the paper sold especially for pastels, which takes up a large amount of color in its rather woolly surface. Common cartridge paper used for wall hangings may be used as previously suggested. Cut from any of these papers a piece, say six by eight inches, not too large at the start; fasten this to a piece of board or a square of very heavy pasteboard, using four thumb tacks.

If you start by copying a choice foreign post card, for in-

stance, there will need to be little drawing done. To be set to "draw" a thing is apt to suggest a serious task, while rubbing in color is play—magic play. With just a stroke or two with neutral tinted crayon block in the most striking forms and let that suffice for drawing. Then do a sky. If it is fair weather rub over your sky space with the very palest yellow, then put on sky blue in patches and streaks. Now, with your finger, rub these tints into the paper—never mind the color on your hands, have a clean rag handy to rub them off. In this way mottle your summer sky. Clouds may be taken out by a little wipe with cloth or a dry sponge, and their edges touched with delicate mauve which is already prepared in pastels. The distance is next put in. The principle here to be observed will be to stick to gray tones, blue-grays, blue-greens and purples, remembering always that the effect of distance is obtained in this way, intervening space making always some haze or at least less clarity. If your shore or house or anything in the middle distance seems too near, gray it and thus send it back. It is easy to do this in pastel where so many lovely grays are already prepared. In using water colors one needs to remember that, given the three primary colors, red, blue and yellow, the gray tone is produced by the addition of the third primary to any two; as, for example, blue and yellow make green, and red being added grays the tone.

People will start at different points to make a picture. It was a habit with Whistler to seize first upon the chief point of interest whether near or far; then, after drawing this, he would expand; but in this way he had always a true picture before him, so that if arrested at any time in the painting it was still a complete picture. Little by little the foreground will be developed. The affection felt by a woman for her first picture is a very real thing. She never knew she could do it. In working in pastels do not hesitate to paint much with the fingers. They are one's best tools. These pictures are rich in color and should almost always be framed or matted in gold. They will rub with the slightest touch and must be jealously guarded until covered

by glass. Pastel fixatif is a French preparation which is rather expensive, but if used carefully saves the picture if not immediately glazed. A blower is purchased for a few cents and a very fine spray sent from some distance over the whole surface of the picture. This is thought by some artists to impair the delicacy of texture, while others advocate a liberal application. It can be obtained only at the best art stores. The ordinary charcoal fixatif will not answer. The quickest and best way is to cover with glass and use *passe partout* binding until ready to frame.

But, some one will say, suppose this patient does not want to do any of these things. Probably she does not. Depressed people rarely want to do anything. Herein lies the test of the fine art of nursing: so to present a thing that a patient, tired and often petulant, is involuntarily stimulated to follow as a wise and well-equipped nurse may surely lead.

Find out if this woman knows how to knit a pair of mittens. So many women knit fancy shawls but would be at a loss to knit mittens. It is well worth the learning. Dressing a doll is not bad work, but try to keep the element of novelty uppermost and do not *kill* time. Time was never intended for slaughter. Teach something in that waiting time which will prove a valuable possession for all time.

There is one article in the exhibit of these classes which has excited considerable interest and can be placed here, although it is best for the most part to steer clear of special preparation. This is a Baby's Cap made from a single handkerchief, uncut. Select a fine hemstitched handkerchief with dainty embroidered border, fold evenly through the center with edges together, then fold from each corner to the center of handkerchief. (Fig. 51.) This brings all the hemstitched edges together, *AA*. Now, holding the center corners *B* together and to the thickness immediately beneath them, let the lower thickness drop down as you pick the upper ones up, and allow the cap to form by folding through the crease in top. Turn back the two center corners like little revers (Fig. 52), leaving the edge underneath *C* to go around

the face. Tack the corners at the top and decorate with a tiny rosette. Make a little box plait in the back to fit in the neck and put on ties of lawn from a second handkerchief, or ribbons. A narrow lace is frilled around face, revers and neck. This fits a very tiny baby and may be easily laundered.

It must be reiterated that few patients will take the initiative, while they will usually follow a truly intelligent and enthusiastic

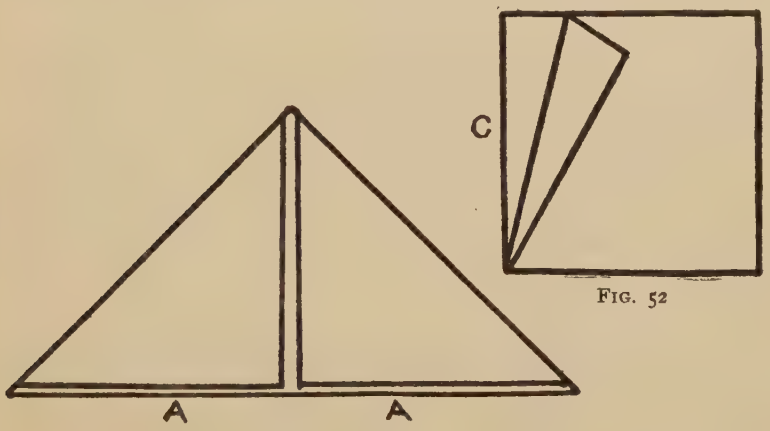


FIG. 52

FIG. 51

leader. During this period you are caring for a mental case, perhaps unconsciously; few women are absolutely normal in their thought and feeling while under this strain. When you fail it will generally be found to result from lack of personal interest, lack of intelligent appreciation or lack of training. You may waken personal interest; intelligent appreciation comes by making a thing the object of thought, and a lack of training may be met by the improvement of every opportunity and the habit of recording and classifying all the suggestions which constitute a part of each day when viewed aright.

CHAPTER XIV

WITHOUT SIGHT

The aim of this chapter will be to offer suggestions more especially adapted to such cases of blindness as occur incidentally during the course of acute disease, after operative treatment upon the eyes or as the accompaniment of other physical disturbance. For congenital cases or for those who have been deprived of sight at an early age, schools for the blind have formulated an educational system which is so finely developed that little is left to suggest. All this, however, is practically unknown to the nurse who is called to help a patient suddenly precipitated into a darkness which cannot be described. This may be in the general hospital, in the sanitarium, in the asylum or in any private home. At any moment a nurse may be summoned to care for a patient in a dark room or one who, although sitting in a flood of sunlight, knows only darkness. "There is no blackness like it" were the words of one whose sight had been suddenly destroyed.

What is the nurse's equipment for service in darkness? Many years ago a wise superintendent said to her class, "Never fail to grasp every opportunity for storing your memory with examples of choice literature which may be used in a room where darkness forbids reading." This has never been forgotten by at least one member of that class. Sometimes the patient's hands must be tied to prevent any slightest possible disturbance of an eye dressing which would jeopard the success of an operation. If, however, during this time the patient's thoughts be led out into "fresh fields and pastures new" by the grace of a beautiful poem, a story or a word picture, rich in colors which the surrounding darkness fails to obscure, much of the weary way will be traveled with good courage. Surely no nurse is truly quali-

fied until she learns how to give to her patients in her own words, or from her own memory, some part of the treasures found in literature.

The first thing which such a patient will need to do will be to get her bearings geographically. Try to recall the sensation which you used to experience when playing Blindman's Buff when, after being blindfolded, you were turned around three times and then told to find your own way. Multiply this sensation a thousandfold and you will, perhaps, feebly approach the bewilderment of one really deprived of sight. It is possible, according to the actual testimony of patients, to be lost in one's own bed. If the patient be brought into new surroundings this sensation is, of course, increased. It may be a help to employ some plastic substance, as plasticene or modelene or common clay or even a box of clean sand. With this plastic substance make a raised plan of the whole floor, suite or grounds. This will be done roughly, but will give such a patient some connected idea of her environment. Paper pulp, which has been fully described in the chapter on contagious work, may well be used for this purpose. As the patient's condition permits she may be taken out to verify this plan.

Next to finding out where one is comes the practice in helping one's self. If the common furnishings of a room were always put in the same places this difficulty would be diminished, but what of other places where all is differently arranged? The tactile sense must be trained to take the place of vision. No matter what the age of the patient may be, this is essentially a new lesson. In this we deal with the very beginnings of a study. Observe closely the hands of a person who has been blind for a long period and you will notice that they seem to *hover* over rather than to touch the objects beneath them. Accustomed to using the hands for grasping, the first thing to be taught is that in proportion to the lightness of touch the sense of feeling will be developed.

An interesting method for training the tactile sense is used

in the School for Feeble-minded Children at Waverley, Massachusetts. A large, stout bag is partly filled with all sorts of small objects. These vary in texture, form, hardness, smoothness, etc. The child's hand is thrust into the bag, the drawstring is pulled up around his arm and he is then required to describe what he finds as the objects are picked up one by one. These articles are in one confused heap and it will be readily perceived that considerable discrimination will be needed to learn them entirely without sight. It constitutes, however, a sort of grab-bag game which is not without interest and which might well be incorporated into the training of the blind patient. If a tray filled with unfamiliar dishes is placed before a trained blind person it will be noticed that instead of groping among them she will barely touch their tops and locate every one. To get the sense of relationship one needs to use more than the finger tips; the palmer surface will also be used. Merely to allow the finger tips to run over a surface does not establish the idea of a whole.

In prescribing occupation for these cases of sudden loss of sight it is usually necessary to take into careful consideration the physical condition which has produced the blindness, and adapt the work to the degree of weakness and shock to the nervous system. First of all let there be no *haste* in the teaching. The patient has to find herself before she can find her work, although, taken quietly, the work may help her to find herself to a great measure.

In the beginning of any sense training, the element of size is important. Whatever work is placed in the hands of such a patient should be large enough to be free from fussy detail. Do not at first set such a patient to stringing small beads or counting small spaces. In all good teaching the first principle is to learn what the pupil already possesses before adding new facts or experiences. If the subject of this blindness be an adult she will doubtless have learned many things and the rational effort will be towards the preservation of this already acquired skill.

One of the great deprivations will be in not being able to attend to her own correspondence. The patient knows how to write, but feels the lack of simple sight guidance. The best aid here is a sheet of lightly corrugated cardboard giving uniform lines and spaces, which is placed under the letter paper. Holding a pencil in the right hand, the fingers of the left hand follow the ridge and keep track of the spaces. Because of this action of the left hand the pencil works better than the pen. It may, however, be an indelible pencil. These pressed pasteboards may be had free of cost by applying to the Massachusetts Commission for the Blind. Application may be made to Miss Lucy Wright, 15 Ashburton Place, Boston. A blind person can learn to use a common typewriter without much difficulty. Very old men have learned this readily. This, of course, opens the way for large correspondence and other forms of work.

Referring again to what the patient already knows, sewing will probably come next, providing the patient be a woman or young girl. If, however, it becomes a question of teaching a child, it has been found wiser to teach KNITTING before sewing. At the Perkins Institution for the Blind in South Boston, Massachusetts, this plan is followed: To teach knitting a large cord is used. The pupil is first taught to make a coarse chain, using his fingers alone without needles. Starting with a loop he pulls a second through this and continues until able to make an evenly spaced chain. These chains made of white cord serve as curtain tiebacks, etc. Next a loop of cord is slipped over the child's left thumb, the cord being held in the fingers of the right hand and the large knitting needle with the right thumb and forefingers. He is now directed to slip this one needle along his left thumb and so under the loop, and is told that his left *thumb* is his *other needle*. There is great advantage in this, as it is a needle possessing feeling and by this he learns the process. As the true needle slips under the loop the cord is passed around it and the stitch knitted. After this has been learned, *two* needles used together as one are substituted in place of the single needle.

This is done to secure a more elastic edge than that given by the use of one needle, but is used only for the first row, after which the single needle is resumed. In this way the pupil learns to cast on or knit on stitches as is desired. Later two needles are used, as is customary.

In the case of an adult who knows how to knit the problem is far simpler. Watching such a patient one notices that the left thumb finds the upper stitch on the left needle and slips it up slightly away from the others before taking it up by the right-hand needle. There is scarcely any form of fancy knitting but may be done by the blind. One elderly lady spends her evenings in knitting dolls' sweaters without using her eyes at all. She is not blind, but having had serious trouble with her eyes in former years, has learned how to save them. One of the very first articles knitted by the blind pupils is a bag made of the heavy cord knitted in a strip, sewed up and hung by one of the hand crocheted chains around the pupil's neck for the purpose of holding his knitting. The knitting classes at Perkins Institution are made up of boys as well as girls. Crocheting is taught more exclusively to the girls. In connection with knitting the rake-work previously described is well adapted to the work of the blind.

Sewing. To teach sewing, carefully graded steps are followed. Strips of leather are punched with round holes in lines; these are used in teaching running stitch, back stitch, overhanding and other plain stitches. The needle used is the "Calyx Needle," which is threaded by pressing the thread into a groove in the top which opens and admits the thread to the eye of the needle. Germantown wool was used for thread. The next step was the substitution of coarse canvas for the leather. In this the holes must be counted and the labor results in some definite article when completed. Darning is taught by cutting out a square in the canvas and requiring the pupil to weave in thread to fill the space. This is done with great regularity. The work from now on does not differ from that of any seamstress. All

sorts of garments, household supplies, etc., are made quite as well as by seeing pupils. Ordinary sewing machines are operated without difficulty, no difference being made except that a clever little needle threader is used which, however, is not made for the blind alone. Before finishing the course the pupil learns to draft a pattern and cut a dress for herself.

Leather Bags. Early in the sewing lessons good leather bags may be made by cutting these from colored suède or finished leathers, and punching the holes around the edges. These are then laced together with a leather thong which runs at first over the edge in plain overhand and is then reversed so as to form a series of crosses. A plain running stitch is also added. Many useful and handsome articles may be made from leather in the same manner. Sometimes large beads are strung on the thongs and give a suggestion of Indian work. The frames of birch bark described in the chapter, "With Waning Powers," are equally suited to this subject.

Weaving. The method employed in teaching a blind child to weave is novel and interesting. In the Kindergarten for the Blind in Jamaica Plain a game is played in which the children stand in a row while one child weaves in and out between them; thus the children's own bodies are used to illustrate the warp threads, while the one child is the weaver or filling thread. After this a common chair is used. The uprights of the back are used as the warp and the child weaves in and out with coarse cord. From this they go to slat, tape and cloth weaving. A rectangular frame is filled with strips of tape tacked on at two sides, leaving the edges of the tapes close together. Wooden slats of similar width are used as weavers in this example. Weaving offers great opportunities to the blind and has been well developed.

It is possible to obtain strips of stiff colored felt which are left over from the manufacture of women's felt hats. These may be cut into strips of uniform width and are then ready for weaving. A rectangular frame is used, the warp strips being

tacked on as described in the tape weaving. Simple in and out weaving of these flat strips results in strong rugs of firm texture. These can be cleaned with soap and water and a brush as they lie on the floor. The edge has one row of flat machine stitching to prevent fraying.

All the simple handmade looms described in the chapter on "Restricted Positions" may be used in working with the blind. Superior work is done by the women in the employ of the Massachusetts Commission for the Blind in Cambridge. Portières, window hangings, sofa pillows and many smaller pieces are woven in designs and colors which are truly beautiful. The hand-woven rugs made by the men are sold in many cities. They sell at the rate of three dollars and seventy-five cents per square yard. The last two kinds of weaving can be done only on large looms and are not so practical for the needs indicated in this chapter.

Pretty bags are woven of two contrasting shades of dress braid. These are made much as the raffia bags are woven which are described on page 54. A piece of pasteboard of about nine and one-half by five inches is covered on one side by a continuous strip of braid. This runs lengthwise of the pasteboard back and forth, and the edges just meet. At the ends the braid is turned each time so as to form an even point through which it is basted to the pasteboard. When wholly covered, double the board so that the two ends come together and the fold is just across the center. With the other color begin weaving over and under right *around* the folded board *once,* close to the folded edge. Cut off the braid each time on the same side, leaving a half inch or so to join. Continue in this way weaving and cutting until within one width of braid of the top. In this last space weave a row of braid, leaving the ends longer for a draw string, and again in the same space, but starting at the opposite side, run a second row of braid for the second draw string. Now clip the stitches holding the braid to the board and carefully draw it out, leaving the bag. Turn in the cut ends and join with a

neat overhand stitch. Tie the ends of the draw strings and ravel for a little depth to form a tassel. It will be an additional security if a line of featherstitch or other stitching be put in just below the draw string. A lining adds to the attractiveness of the bag.

Chair Caning. A good deal of emphasis is placed upon this work for the blind. Many chairs are so made that the seat may be taken out and fastened to a bench by hand screws or a vise. It is then far less clumsy to manage. The cane is obtained from the rattan factories and basket supply shops, also at school supply places. After the old cane has been cleaned away the start is made by bringing the cane up at one front corner and across from front to back, repeating until the holes are full. A few wooden pegs will be required to drive in to hold the cane while drawing through the next holes. The second set of canes run straight over the first but from side to side. The third set run diagonally, going under the canes running from front to back and over those which run from side to side. The fourth row run straight from front to back over the others with no weaving. The fifth run diagonally under two and over one. The sixth run diagonally under those running from side to side and over those running from back to front. To bind the edge use larger cane, laying it flat over the holes around the edge and bringing a smaller cane up through each hole and over the wide cane, then down through the same hole again. This completes the process. The boys at Perkins Institution do the caning for a chair factory which ships the seats alone to the institution for this work.

Rush Bottom Chairs. The rush bottoming of chairs is particularly interesting. This is done with the common bulrush or cat-tail leaves, which should be gathered before the twelfth of August or before the heads turn brown. These flags are then dried in the shade and are to be soaked for several hours before using and kept wrapped in a damp cloth while in use. If necessary to buy these, they may be obtained from Lang and Jacobs,

24 India Square, Boston, Massachusetts. This is a cooperage supply place and the flags are sold to pack between the staves of barrels to make them tight. For this reason there is a good deal of waste when purchased for chair work.

To teach rush bottoming, any small rectangular frame may be used, but a chair is done in this way: A few of the hard butts of the rush are tied to the inside of the chair frame to make a little padding next to the frame. Twist the green rush to a smooth, round cord, hold it over one corner of the frame, bring it around the side and up through the center, over the next side, then over the left-hand side of the frame close to the corner, around and up through the center, then directly across to the opposite lower right-hand corner, over and up through the center, over the lower side and up through the center. In this way follow around the frame, always bringing the rush up through the center, over one side of the corner, up and over the other side of the same corner before crossing to the next. In this way fill the entire rectangle. If oblong rather than square, the last rush will run from side to side, omitting the other two sides until the space is filled. All the time this is going on the flags are constantly twisted to form an even rope. When necessary to splice, the thick end of the new rush is stuck down between the lower ropes and then twisted in with the first one. Should the cord be too large, a rush may be dropped out in the same way by sticking it down between the lower cords, and when the seat is finished all these ends cut off short. This makes a very handsome and durable chair seat.

Coir Yarn Rugs. Coir yarn is a stiff, coarse yarn made from cocoanut fiber and very useful in making outside doormats. It is imported from India and costs about five and one-third cents per pound. It may be obtained from the Boston Mat and Basket Company, 62 Fulton Street, Boston, Massachusetts; also of Darragh and Smail, 177 Water Street, New York City; but from the latter firm only in large quantity.

To make these rugs a rectangular frame of common strip wood or even an old window frame or other fairly heavy frame will answer. The size should be that of the rug desired. Across the two narrow ends drive wire nails at a distance of three-eighths of an inch apart, driving in securely. On these the warp is strung, keeping the yarn as taut as possible. It is quite possible that a different rope or heavy cord would work better for the warp, as the yarn is uneven and chafes somewhat. It is used, however, at Waverley, and is the best which these workers have yet found. Wind, after tying the first loop to the first nail, straight up to opposite end around two nails, down and around two lower nails and so back and forth until the space is filled. Now cut short lengths of the yarn; about five inches will answer. Many lengths may be cut at one time by using a paper cutter such as is used to cut mounts for photographs. Put *one* short length yarn over *two* warp threads, bring the two short ends down outside the warp threads and then up between them in the center toward you. With the two short ends held evenly together, pull up tightly so that the cut ends stand up. In this way continue across, tying over each pair of warp threads. Begin the next row by omitting the first warp thread and tying over the second and third threads. This divides the first pairs and leaves one unused thread at the end. The third row is like the first. Alternate these until the whole space is filled. Make a braid of the yarn and sew around the base of the mat after taking from the frame. The braid is set up on its edge and sewed on with a sail needle. This method of tying or stringing is capable of much variation. The short strips may be of cut rags, of wool or any finer material. The method is identical with that used in making the fine Oriental rugs which command such fabulous prices. From coir yarn is also made the sort of zigzag pattern rope rugs often seen. These are made of the braid and sewed with a sail needle.

Baskets. The coarser baskets are well suited to the work of the blind patient, as those of reed or reed and raffia combined.

One charming basket was melon shaped and made by joining two oval hoops of heavy reed at right angles. One hoop thus formed the handle and the midrib of the bottom and the other the top of the basket. They were joined by winding around the crossed reeds so that the raffia used to wind formed a square on the outside at the junction of basket and handle. This winding was continued until the square was an inch and one-half in diameter. Four other reeds were then cut of the right length to spring in on either side of the midrib at regular intervals, being held by the ends against the woven squares. A weaver was then used of common, uncolored raffia braid. This was first wound round and round the handle and then woven in and out across the basket. All this might be done by one without sight.

Netting is fairly well adapted to non-seeing patients. A netting needle, a mesh stick and macramé cord will be required. Hammocks, net bags for laundry, shopping bags, etc., are made quite easily. Good directions for this may be found in the Manual Arts books for elementary schools. The book, "Occupations for Little Fingers," by the Misses Sage and Cooley, gives good directions for netting.

Beadwork can be done with great accuracy and success by the blind. The little Apache looms can be bought, but a great variety of strung necklaces need nothing but needle and thread for stringing the beads. Colors are managed by keeping the beads in different boxes.

Braiding. Many materials may be improved and rendered more useful by being braided. From the old-fashioned rag rug to fine straw for hats, raffia for baskets, rush for the larger baskets and furniture, rope for rugs, tape for belts, this principle will apply. This has the advantage of suiting almost all domestic environment.

In one schoolroom for blind children one end was occupied with cases of stuffed animals of many sorts. The stuffing of cloth animals might well be done, provided they were cut out by a seeing worker.

Stitching up books according to the rules given in the chapter on "The Business Man" seems to come within the range of these patients.

A large order business in the making and making over of hair mattresses is carried on by blind operatives. While this is out of the range of the private invalid, its principles might easily be applied in the making of comforters or puffs for beds. The device used to insure evenness in the tufting of mattresses by the blind is a wooden frame the top of which is divided into square openings. The mattress lies on this frame. One tuft goes in the center of each square hole. A frame across which strips of stout tape were fastened so as to divide it into squares could be used in tacking the puffs.

In many instances professional work can still be followed. We have blind teachers, piano tuners, musicians and masseuses. One who has learned the Braille characters can make a great variety of books of fine selections for the blind. Raised books are always expensive, but these can be easily and cheaply made.

The recently blind are apt to dwell upon the loss of color which they experience, but who having seen a rose can ever forget its pink? Who having looked into deep summer sky can ever escape from the spell of its blue? Color has become a thing of the mind rather than the eye, and a word may quicken it anew, for it has in it a true immortality.

Should the great misfortune of loss of sight overtake a man or woman of active and ambitious life, the occupation suggested should, if possible, be in some way connected with their chosen work, otherwise it may seem so pitiably small as to be actually repugnant. This has been inimitably set forth by one who said that after her loss of sight all her friends had set her down to braiding rag rugs, and the picture of herself in some "Home" garbed in a crushed strawberry forty-nine cent cotton wrapper making a rag rug was inexpressibly distasteful to her. There is, however, a fairly good variety of lesser talents which may be developed, only let them stand *as* lesser talents and do not pre-

sume to replace a full, active life work with a rag rug or any activity other than the best of which the patient is or may be capable.

An acknowledgment is due to the following institutions for their great courtesy in explaining methods of work and their mutual interest in the subject of this chapter:

The School for Feeble-minded Children at Waverley, The Perkins Institution for the Blind at South Boston and Jamaica Plain, The Massachusetts Commission for the Education of the Blind at Cambridge.

CHAPTER XV

THE CLOUDED MIND

BY E. STANLEY ABBOT, M.D.[1]

THE term *occupation* is here used in its broad sense of any purposeful, orderly activity of mind or body. Neither can be used alone, though sometimes one will greatly predominate over the other. In polishing a floor the body chiefly is active; in reading, the mind; but neither exclusively. The activities may be directed to work, whether constructive (as in any of the handicrafts) or destructive (as in making certain alterations and repairs), or to mere pastimes for pleasure and enjoyment (such as games of all sorts), or to physical culture (such as various gymnastic exercises and some dances), or to various combinations of these objects.

In this sense the occupation of persons with mental deficiency or perversion, whether developmental or acquired, presents its own peculiar difficulties, which, though due chiefly to the mental condition of the patient, are also partly due to certain physical limitations. One has to deal with persons who have a lower grade of intelligence, as in the feeble-minded; or whose interest is difficult to arouse and sustain, as among certain demented patients; or whose mental processes are slow, or who get very

[1] To the Secretary of the Chicago School of Civics and Philanthropy, which has given for the last three years to nurses and attendants a course on Occupations for the Insane, and to Drs. Walter E. Fernald, William Mabon, R. H. Hutchings, Henry A. Cotton, George A. Zeller, Frank P. Norbury, C. H. Anderson, O. C. Willhite, and Fred W. Terflinger, I am indebted for data and suggestions of many kinds, and I wish to express here my appreciation of their kindness. But to Dr. Mary L. Neff, whose paper on "Occupations for the Insane," read before the American Society of Superintendents of Training Schools in New York in May, 1910, was a valuable contribution to the subject, and of which she gave me free use before its publication, I am especially indebted.

easily fatigued, or to whom even such slight tasks as buttoning a coat or putting on shoes seem very difficult, or whose tendencies to suicide set narrow limits to possible occupations, as among the depressed. Some of the problems which the nurse must strive to solve will tax her ingenuity, tact and patience to the utmost.

No one questions the benefit and value to the patient of occupation. What Dr. Fernald says of the feeble-minded—"a busy boy is a good boy"—is equally applicable to persons of all ages and both sexes, provided the "business" can be well adapted to the individual. The problem is to fit the occupation to the patient's capacities and needs—to find what he can best and most profitably take up; to find adequate motives; to stimulate interest, and to keep it sustained. It is easier of solution the more nearly normal the patient; it is hardest when one has to deal with patients who have lost either temporarily or permanently the power of continuous application or attention, or the capacity to be interested. In the limits of one chapter only the main principles, precautions and suggestions necessary for the occupation of some of the great groups of the insane can be outlined; their application to the particular person must be left to the judgment, skill and tact of the nurse. It must be remembered that at best there is a large percentage of patients who cannot be occupied at all, but with effort, persistence, ingenuity, patience, moderate expenditure of money and much of time this percentage can be greatly reduced.

Those whose minds are clouded comprise not only the insane, properly so called, but also the feeble-minded of all grades and the epileptic. There is a growing tendency to bring the criminal also into this group, but these will not be considered here. The other two groups will be taken up briefly, and then the insane proper at somewhat greater length.

The Feeble-Minded. These are children, in development if not in years. Their age, so far as occupation is concerned, is measured, not by the calendar, but by their interests, intelligence

and capacity as compared with the various grades of normal children. They are all characterized by *slowness to learn,* requiring many repetitions of the same lesson before it is learned; by *shortness* and *uncertainty of memory,* requiring more frequent reviews and practice; by *lessened persistence* and power of application or sustained attention, requiring shorter lessons and more frequent changes of occupation; by *diminished judgment* and defective power to draw conclusions or to reason a thing out, requiring simpler and more explicit directions, and object teaching rather than didactic instruction; by *less capacity to be interested* except spontaneously, requiring special effort to stimulate interest, as by rewards, competitions, appeals to simple, elemental desires; by *greater vanity,* requiring praise and commendation; by a *tendency to slipshod, careless work,* requiring long-continued, patient drilling; by a *tendency,* especially among the less highly developed, to *monotonous mechanical repetition of acts,* which can sometimes be utilized in sawing wood, turning a grindstone, polishing floors, ironing and other simple to-and-fro occupations; and physically by more or less imperfect development, with *poor muscular coördination,* requiring physical drill, training and oversight.

Besides ordinary games, both indoor and outdoor, such as any normal child or youth would enjoy, the feeble-minded can with benefit take up more formal occupations under instruction. These vary from such very simple things as stringing spools or large beads, sorting blocks of two or three colors, picking up bits of torn paper, etc., to more complex activities, such as lace making, weaving, basketry, carpentry and Sloyd work, and any of the simple handicrafts. Even very defective persons may sometimes become fairly efficient helpers in domestic occupations and the trades, such as kitchen, dining room and bedroom work, nursery work, washing, ironing, sewing; or carpentry, plumbing, painting, boot and shoe repairing, mattress making, broom making, furniture repairing, etc. The farm and garden, with their varied needs, furnish work adapted to quite wide variations of

intelligence. All work, however, must be under guidance and direction.

The feeble-minded do better in classes than in purely individual work, though even in classes each individual needs much careful oversight. Not only on this account is a school for the backward, deficient or feeble-minded better than a private tutor in the home, but also because the institution, with its many activities, can furnish greater variety of occupation of about the same degree of complexity than the home can be made to supply. And it is a great advantage to have as large a variety as possible of such occupations, in order that a change may be made from one to another before interest lags or the work grows monotonous.[1]

The Epileptic. Many of these are somewhat backward mentally, and all are liable to sudden convulsions or periods of unconsciousness, coming usually without warning. After the attack the patient is often sleepy or irritable for a longer or shorter period (from ten or fifteen minutes to several hours).

Epileptics can take up any occupation that others of their own age or mental development can, except that they should not work on high places or where they cannot be observed by some one who can help them instantly if they fall into machinery, water, etc. It is better if they do not use sharp-pointed or sharp-cutting instruments, lest they injure themselves or others during or following the seizure. There is also danger, always possible though not very often occurring, that after the convulsion or seizure the patient may make a violent, unexpected and unprovoked attack on some other person.

The mode of onset and the character of successive seizures are very apt to be about the same in any one patient, though quite different in different patients, so that occupations highly inadvisable for one might be allowable to another. Any occu-

[1] The annual reports of the Massachusetts School for the Feeble-Minded, at Waverley, for the years 1908 and 1909 contain very informing descriptions of the methods in use there. A visit to the school itself will well repay the time and trouble spent.

pation, whether work or play, not contraindicated by these limitations is suitable for the epileptic, except that too great emotional excitement, as in a closely contested game, may precipitate an epileptic seizure.

The Insane. There are so many forms of mental disease, and so many manifestations of each form, that in a chapter of this extent only the crudest generalizations can be used for grouping cases. In all patients there is an abeyance of some of the mental powers or activities, even though at first sight it may not appear so (as in the case of mildly excited patients who often superficially seem to have heightened powers); and in many patients there is a permanent loss of mental activity in one field or another. Here they will be grouped roughly into those whose most obvious characteristic is (1) *depression of spirits*—sadness, despondency, gloominess, discouragement; or (2) *excessive activity*, perhaps with good spirits, perhaps only irritability—even to violence and destructiveness; and (3) *dementia*—a permanent loss of some of the power to adapt one's self to the conditions of life.

Before taking up the occupations best suited to, or most feasible for, each of these groups, certain elements of the problem, applicable to all the groups, will first be considered. Some of these concern the individual, others his circumstances and surroundings.

In health, persons have their vocations and their avocations. It is natural that we should seek among the latter—among those occupations which fill the leisure moments, the pastimes which spontaneously interest—for hints as to what the patient may take up when the mind is clouded. These avocations will be modified or determined by some of the same elements.

One of these elements is *sex*. In health, when not actually engaged at their vocations, men, when in the house, loaf, lounge about, smoke, read the daily paper, while women keep their hands busy at knitting, crocheting, embroidery; men go out to the club, theater or other place of entertainment, such as ball games,

billiard and pool rooms, or even the bar, while women tend more to sit and sew or read, or go to the neighbor's and play cards, drink tea and chat. When men do occupy themselves with work, it is more apt to be with tools—hammer, chisel, saw, rule, spade, hoe or axe, while women are more apt to take up lighter, more æsthetic and decorative tasks. These differences hold to a large extent when the mind is clouded. They are indicated in Chapters XII and XIII.

Another element is *age*. Young persons like more active pursuits than the middle-aged or elderly. Youth plays tennis, baseball, basket ball; runs, skips and dances, while middle age walks, plays golf or games of cards, checkers and chess, and old age sits and smokes, knits, chats and dozes.

The degree of intelligence, amount of education, the natural interests and the occupation when well are still other elements, and will have their influence in helping devise occupations, or setting limitations to them. The professor or the clergyman will differ in these respects from the carpenter, the day laborer or the office clerk.

There are environmental elements, as well as the personal ones just mentioned, which will partly determine the occupations of mental patients. Among these are the size of the patient's income. Materials or facilities easily obtainable by the patient of large means, such as automobiles, yachts or even lathes or woodworking implements or rug or carpet weaving looms, would be out of the question for the person of moderate means, and quite impossible for the poor in their own homes. Besides, the size of the income often sets standards for normal occupations in many other ways as well.

Different activities are open to the patient who is in the country, where farming and gardening operations are going on, from those available in the city, where occupations outside the house must be more artificial and are less in variety and number, and less well adapted to the mentally beclouded. For they make more demands on the mental and less on the physical energies,

whereas it is usually most helpful to rest the former and exercise the latter.

Large institutions like the state hospitals, with a daily average population ranging from one to five thousand patients, have certain advantages which the smaller ones lack. Among so large a number a larger or smaller group of patients can be got together whose interests and capacities are enough alike to form classes, in which all learn to do the same thing, such as leather work, at the same time. In the smaller hospitals, if enough patients cannot be got together for *class* work in the same occupation, *group* work, in which several patients work at different things simultaneously in the same room, is possible. The advantages of class or group work lie in the stimulation of interest (one of the difficult problems to solve) through imitation of others or seeing others work; companionship with others in one common aim, as in the sewing room; coöperation with others in the making of one finished product, as in dressing dolls; competition and rivalry with others, to see who shall make the most, or the best, or the most artistic thing; and conference or discussion with others, serving to bring out new ideas.

Another advantage of the large institution is that there is a large variety and considerable amount of work useful and necessary to its maintenance and running, in much of which the patients can take part. And again, the installation of special apparatus, like looms, is more economical, and beneficial to more persons, in the large than in the small hospital. On the other hand, it is often possible to give much more time and individual effort to a single patient in a small hospital or sanitarium, and certainly it is in the home. The small private hospital is not much different from the patient's own home, in the facilities usually afforded by special apparatus.

So much for the patient and his environment. Another large element in the problem of occupation is to find a sufficient *motive*. It is easier to find something that the patient *can* do than to find something he *will* do. One needs to be resourceful,

with a large variety of appeals, for it goes without saying that even in health what appeals to one person will not to another. The difference is even more marked among the insane. Appeals may be made through praise, competition, rewards; to the sense of the beautiful or of the useful; through affection for relatives, home needs, gifts to friends, or more diffuse altruism, as helping other patients, making preparations for special entertainments, such as Christmas gifts and decorations, work for children, especially orphans, or for cripples, the blind, the poor and needy; or for persons in specially isolated or exposed positions, such as lighthouse and lightship keepers; or for sailors' missions, Dr. Grenfell's, and other foreign and home missions, prisoners, invalids, other patients; or through imitation, or by seeing others work.

As examples, many patients became interested in making clothes for a near-by orphan asylum—the interest was enhanced by the children visiting the wards afterwards wearing the things that had been made. One elderly woman, nearly eighty, with cataract of both eyes so that she could no longer read, knitted helmet toques for the men stationed on a lightship not far from her home town. Another woman, in bed a large part of the time, over seventy years of age, makes many scrapbooks for missions. Some men mend broken golf sticks, make frames for pictures to hang in their rooms or in the ward, cut picture puzzles for themselves or others to put together. These are but a few of the many things that can be done for others. The most lasting incentive is usually an altruistic one, and hence "the personal note should be used repeatedly,"[1] that is, the patient asked to do this particular thing for this particular person. But other motives may be sought in the patient's daily work when well, or among the things he does for recreation and pleasure.

As for the occupation itself, if one is trying to interest the patient in constructive work, it should be if possible "interest-

[1] Unpublished paper of Dr. Mary L. Neff.

ing, more or less familiar, easily done, soon finished and of obvious use,"[1] and "the product should have color and form to give æsthetic value, and should not require very fine muscular coördination"[1] in the making, especially for those who are just beginning to be occupied with work.

In trying to occupy patients, "the most desirable plan is to have occupation an integral part of the daily life,"[1] and hence "a regular schedule of occupations which accounts properly for every hour of the patient's time"[1] is advisable. The occupations should be varied, not too long a time devoted to any one, and work should be interrupted by pastimes, for recreation, relaxation and variety. Above all, "the signs of fatigue should be looked for with great care,"[1] especially among depressed patients. These may be the ordinary symptoms of wandering attention, feeling of fatigue, headache, flushing of face, feeling of confusion, carelessness or diminished accuracy of work; or other less readily recognized ones, as greater speed, quick, nervous movements in doing the work, restlessness, impatience, hilarity, talkativeness, less good judgment about the work, greater carelessness and even a tendency to keep at it till it is finished.

Having considered these general elements of the problem, we come now to the special occupation of the first group of patients.

1. The Depressed. A patient with depression is to be considered, first of all, as possibly or actually *suicidal*—a point never to be forgotten or let out of the mind of the nurse for an instant, though her understanding of the fact is to be as skillfully and tactfully hidden as the necessity for watching the patient will allow. Hence sharp-pointed or sharp-edged instruments, such as steel knitting or crochet needles, embroidery or other sharp-pointed scissors, penknives, sometimes even needles and pins, steel nail cleaners, to say nothing of wood carving and other cutting tools, must either be kept away from these patients, or the patient kept under close and unremitting observation

[1] Dr. Neff, *loc. cit.*

during work, and the instruments *all* counted and put away under lock and key as soon as the patient has finished with them for the time being. Large wooden or celluloid knitting or crochet needles and blunt-ended scissors may be used more safely.

Most depressed patients are *easily fatigued,* mentally especially, but also physically, even though they say they cannot feel tired, wish they could, and are constantly walking restlessly up and down, apparently never tired. Hence the more restless ones should be tried only with coarse work, easily done, and not kept too long at it. It sometimes makes a difference to the patient whether the work is light or heavy in weight, and what is light to the nurse may seem to be heavy for the patient. The nurse should never make the mistake of measuring the difficult or fatiguing qualities of the work to the patient by what is difficult or fatiguing to herself or to the average well person. A sort of nervous haste, in which the patient does faster work and doesn't complain of being tired, is one index of overtire. Work should be done leisurely and with relaxation. Tell your patient: "Don't work in a hurry. Take all the time you want. Don't feel as though you must do a certain amount in a given time. You have all the time there is for doing it. Don't make a task of it. Don't drive yourself."

As depressed patients are emerging from such depths of depression or agitation that they cannot be occupied, a beginning can be made by the nurse dressing a doll for a child, or doing some rather easy embroidery for a friend or relative, or making an apron for herself, that may catch and hold the patient's attention and interest for a short time. It may start the patient to helping a little by holding the work, winding yarn, suggesting a pattern, basting or the like—all simple, easy things requiring little thought or holding of the attention or careful coördination. Pictures in a magazine, like the London *Illustrated News,* can be looked at for a few moments and commented on. Simple one-pack games of solitaire in which no combinations or calculations have to be made can be tried; then come coarse crochet-

ing or knitting with large needles, work that does not try the eyes or require much planning. The easier forms of reed and raffia basket work, with plain weave and design and one or two colors in bands, may next or at this time be tried. Soon the patient can try water color painting, at first copying simple things, then from nature.

As the patient becomes capable of longer continued attention and occupation, increasingly complicated and finer work and games may be taken up, for which the previous chapters give many useful suggestions. One point that the nurse should never forget is that splendid physical appearance—good color, firm flesh, normal or above normal weight, good appetite—is quite compatible with great mental and physical fatigability. Planning work, deciding on colors or patterns, or work in classes where there are many persons may be very difficult for a patient who may look the picture of health. Grave injustice is sometimes done to such patients, with delay of recovery, by the nurse or friend not recognizing this fact.

With many, *thinking* is *difficult* and *actions* are *slow;* so directions must be clear and plain, simple, slowly given and sometimes often repeated, and the patient must not be hurried or put in competition with others who can work faster. Individual work is better, as they get easily discouraged, though they may look on at class work and be encouraged, though not urged, to try some simple thing.

Occupations for the more depressed men are more difficult to devise, because men when idle turn less to hand work than women normally—they smoke, read, talk, but loaf. Domestic and altruistic constructive work is less their habitual occupation. Pastimes rather than constructive work have to be relied on. On emerging from the deeper depressions they may take up polishing a floor, dusting a wall, shoveling snow or tossing a baseball, football or medicine ball, or looking on while others play games. Then comes participation in games; pool is an excellent starter, but the balls and cue must be on the table, inviting the patient—

checkers and backgammon are among the early games, with perhaps simple games of solitaire. Men are less easily troubled by the confusion of many around them, so class work in gymnasium exercises can often be taken up rather early. Glancing at the daily papers can be encouraged rather early also. For younger men, batting and catching ball, quoits, later billiards, golf, tennis and bowling. For elderly men, walks, drives, reading, cards—euchre, whist, bridge—and for all, the newspaper, illustrated magazines, books. For both men and women, drives and trolley rides should be first in the less frequented and populous districts, to keep them out of bustle, stir and noise. Their minds are tired, and they should not be expected or urged to do much with them.

2. The Excited. Patients of this class belong either to a usually recoverable group, or to a group that dements and belongs partly or wholly in the next class. Reserving the next section for the quiet dements, I will speak of the disturbed cases of the dementing group together with the recoverable excited cases.

The recoverable cases usually show some differences from the others, in that they are freer and more varied in their activity and are more distractible. They have great "pressure of activity" and cannot keep still long. Rough, crude work requiring expenditure of considerable energy, and in which the result is soon apparent, is the best for them. They are incapable of fine or finicky work, but can take up such work as quarrying,[1] road building, clearing ground of timber, doing concrete work. A state hospital in Missouri has "transformed the men's violent ward . . . to the most quiet ward in the hospital" [2] by such work, and the superintendent regrets that he cannot supply similar occupation for the women's violent ward. Dr. Cotton (New Jersey State Hospital, Trenton, New Jersey) writes privately that since 1907 ninety patients have been taken from restraint,

[1] Rep. Direct. of Poor of Chester Co., Embreeville, Pa., 1908, p. 13.

[2] Rep. State Hosp. No. 3, Nevada, Mo., 1907–08, p. 16.

and sixty of these, who were "considered destructive and violent, are today doing very good work on the wards," such as "sewing, mending, embroidery, helping in the dining rooms, assisting other patients to dress," etc. Farm and garden work, clearing and keeping up of grounds, building of recreation and industrial buildings, and outdoor games, such as pitching baseball, kicking football, throwing medicine ball, and in general occupations with a good deal of bodily activity and comparatively little head work, can be indulged in by even pretty excited and excitable patients.

Even patients who are constantly tearing clothing and have to be kept in seclusion because they will not keep any clothing on can have their destructive tendencies turned toward tearing up newspapers, illustrated magazines and old rags that are otherwise useless; and sometimes they will play for a time with a rag doll. The graphophone will entertain or amuse them often, and keep them from destructive activity. Like the feeble-minded, their attention soon lags, and no one thing should be tried for long at a time.

Some, the milder cases, are very fertile in designs for mischief, and the task of diverting their activities into harmless channels and diminishing their activity are the chief problems. They seem supernaturally keen at first glance, but their judgment is diminished, both as to the fitness of things and as to the relations of mine and thine, especially thine. They are usually incapable of fine work, such as fine embroidery, and their efforts at decoration are often crude and lurid. Nevertheless it is better that they should paint water colors on paper even if they splash themselves, their clothes and the table covers with paint in their efforts to make portraits or landscapes, or that they should crochet, knit or embroider useless and impossible things with the most outrageous color combinations, with the idea that they are doing something useful or beautiful, than to exercise their indefatigable energies on destructive mischief, or grow irritable for lack of occupation.

3. The Demented. These are the patients that make up

the larger part of the population of our hospitals for the insane, and among whom is found a large percentage of unoccupied persons. They have permanently lost more or less of their capacity to adapt themselves normally to the ordinary conditions of life, either as the result of gradually failing powers, as in senile and paralytic patients, or by reason of delusions whereby in some respects they quite misunderstand their environment, or by reason of an apparent apathy and indifference or both.

Those whose mental powers are failing are also usually failing more or less in physical strength or endurance, so their tasks must be light and not long continued at a time. For a while some of them may be occupied with such things as they learned in their younger days, as knitting or crocheting, but their memory for recent things is poor and their power to take in and retain new ideas is diminished, so they cannot be taught new things. Chapters XI and XIII give excellent suggestions for occupations that may be tried for a time, but it is to be expected that the time will come when no efficient or sensible work can be done, though the hands may still fumble with crochet or knitting needles.

By far the larger portion of this group, however, is made up of patients who have had a more or less acute attack of mental trouble in the years before thirty or thirty-five, and are left permanently damaged, usually with little or no initiative, and many of whom sit all day in silent, idle rows on the wards, gazing for hours at the floor or walls, only getting up to go to meals, to bed or for a short walk. Spontaneously they do nothing, and they often seem incapable of being interested in anything. Some walk monotonously back and forth, but seem utterly indifferent to those about them, and are as idle as those who sit. The problem is to arouse and sustain their interest.

It is these patients, forming a numerically large class, that special efforts have recently been made to occupy or re-educate. In a personal letter Dr. Hutchings writes, "The presence of a

profound degree of deterioration, even of long standing, . . . does not in my judgment preclude the possibility of considerable improvement." To show what may be accomplished by persistent, intelligent, painstaking and sympathetic effort, two cases will be cited.

A man of twenty-seven, in Sauk County Asylum in Wisconsin, insane four years, who usually sat quietly in one position with eyes closed, taking no interest in his surroundings, never making any effort to move about or associate with others, never answering questions addressed to him, at times irritable, at times laughing to himself, sometimes tearing his clothes and attacking those near him and very neglectful of his personal appearance, was taught to do pierced brass work and make raffia baskets, with marked improvement in appearance and behavior.[1]

A woman of twenty-three, in St. Lawrence State Hospital, New York, insane for three and one-half years, who, after some months of destructiveness, grew dull, stupid, untidy and careless in habits, drooled constantly, did not speak or look about her and rarely moved unless required to do so, and whose hands were stiff, blue and cold, first had for three days passive movements of fingers and arms, and was then given a pair of scissors and urged to cut a picture out of a paper. Several days were required before she could do this without having her hands held and guided. At the end of two weeks she could string beads and catch a bean bag. A week later she was modeling in clay. At the end of a month from the beginning she had ceased to drool, sat up straighter, liked to be dressed better, talked voluntarily, worked on raffia baskets and had begun to draw. Later she had become quite industrious and had learned to sing. She had become interested in her progress.[2]

It is true these are exceptional cases, but they occur often

[1] Reported in prospectus of the Chicago School of Civics and Philanthropy.

[2] Annual Report, St. Lawrence State Hospital, N. Y., for 1909, p. 30.

enough to make effort well worth trying even in the most unpromising cases. Of the previously unoccupied and apparently unoccupiable group, about 400 out of an average hospital population of about 2,200 at Peoria, Illinois,[1] 200 to 225 out of an average population of about 5,000 at Manhattan State Hospital, New York,[2] 60 out of 90 women previously in restraint night and day at Trenton, New Jersey,[3] about 100 out of an average population of about 3,500 at Dunning, Illinois,[4] about twenty per cent of those previously unoccupied at Menard, Illinois,[5] about 50 out of an average population of 950 at Logansport, Indiana,[6] have been occupied, the numbers depending partly on the number of teachers, partly on the things taught and partly on the persistence of effort of medical and nursing staff.

Occupations for these patients include not only work of many kinds, but also recreations or play. For example, at the Manhattan State Hospital, New York, folk dancing is taught and learned by more or less demented patients, with much increase of enjoyment to themselves and those who look on. Drills, marches and contradances, simple athletic games, like bean bags and medicine ball, even very demented patients can be taught. Such recreations may well be sandwiched in between more sedentary pursuits, such as sewing, weaving, basket making, cane seating, broom making, etc.

To teach a large proportion of patients of this kind often requires a great deal of time and patient, sympathetic work devoted to one individual patient. In a hospital, special instructors in different branches of occupation are sometimes employed, such as kindergarten, Sloyd, singing, dancing and general handicraft teachers. But it is the nurse on the ward where the patients

[1] Dr. George A. Zeller, personal letter.
[2] Dr. William Mabon, personal letter.
[3] Dr. Henry A. Cotton, personal letter.
[4] Dr. O. C. Willhite, personal letter. Cok C. Int., Il.
[5] Dr. C. H. Anderson, personal letter.
[6] Dr. F. W. Terflinger, personal letter.

live who has the best opportunity to interest them. The more she knows of various handicrafts and the more resourceful she is, the more of the demented patients can be occupied. She is the one who sees most of them, and perhaps knows their personalities best, and she is in daily, hourly contact with them. She therefore has the best chance to find what special thing can make an appeal to the individual patient. She should, however, get the previous sanction of the physician to any given plan she may have, on account of special dangers and precautions that may have to be considered.

In the hope that it may prove suggestive to those who may have the care of demented patients, either in hospital or private practice, a list is added of occupations, both work and play, which have actually been taken up and pursued by patients previously thought to be incapable of being occupied. It is not complete, but contains several examples of different types of occupation for both men and women, outside of the routine domestic, farm and garden work of the hospital. Although the occupations are grouped under those for men and those for women, there are many which can be taken up by either. Some require no apparatus, some a little inexpensive apparatus; for some considerable outlay is needed. Some require the coöperation of several persons, others not. It would take many chapters to describe these occupations and their application to individual patients, so that will not be attempted here, but must be left to the ingenuity of the nurse or caretaker.

HANDICRAFTS

Men

Drawing: pen and ink, pencil, crayon; copying sketches; illuminating.

Punched brass work.

Printing.

Bookbinding; making albums.

Sloyd; carpentry; cabinet making; wood carving (making pen trays, paper knives, paper weights, blotter pads, whist counters, cribbage boards, picture frames, card, glove and handkerchief boxes, bookracks, wall brackets and cabinets, footstools, plant stands, bellows); furniture repairing.

Cane seating chairs, brush and broom making; coir mat making; mattress and pillow making.

Breaking stone; road building, ditching, grading; making cement blocks; clearing wild land.

Women

Water color and oil painting; china painting; stencil work; drawing.

Beadwork, chains, purses, bags.

Cutting out and pasting pictures.

Passe-partouting.

Clay modeling; leather work; hammered brass work.

Reed and raffia, and other forms of basketry.

Hand and machine sewing; embroidery of various kinds; Mexican drawn work; crocheting; knitting; tatting; quilting; lace making.

Weaving cloth, rugs, carpets; tearing, sewing and coloring carpet rags; making hammocks; netting.

Making mattresses, pillows, mats.

Making bandages.

GAMES AND EXERCISES

Men

Cards: solitaire, single and double pack; whist, bridge, euchre, poker, etc.; checkers, chess, backgammon, parchesi, dominoes.

Billiards, pool, bowling.

Quoits, shuffle board.

Tennis, golf, baseball, hand ball, basket ball.

Skating, coasting, snowshoeing, skiing, curling, kite flying.

Women

Piano and other musical instruments; singing.

Bean bags, ping-pong, medicine ball, battledore and shuttle cock, ring toss, croquet, bagatelle.

Picture puzzles.

Swing.

Calisthenics with and without apparatus; marching drills; square, contra and round dances; folk dances.

CONCLUSION

In all the varieties of invalidism suggested in the preceding chapters, the holding of the mind to a normal pursuit is favorable to improvement or even recovery. Being convinced of this fact, the physician may prescribe occupation in a somewhat general sense, indicating only by larger classification, as indeed he might prescribe in the diet more protein and less carbohydrate; the decision as to whether it shall mean a dropped egg or a bit of beefsteak, less potato or less toasted bread, falls more naturally to the province of the nurse.

Certain activities act as sedatives to some subjects. Knitting has been so classified by some invalids, and may therefore stand as a remedy for over-irritability. Many forms of depression are dissipated to a degree by the sense of satisfaction experienced in a piece of completed work or the consciousness of newly acquired skill. Many strong emotions fatigue, but mirth is a safety valve and does not exhaust, and no end of merriment may result from the early blunders of an invalid student. One old man was induced to try to stuff birds. He got as far as one bluejay, which presented a most distorted and melancholy appearance. Despite all this the old man never failed to point with genuine pleasure at the bird and, rubbing his hands, would exclaim, "Well, well, if there isn't my thundering old bluejay!"

Very young children often construct a thing which seems to lack both shape and meaning to an older mind. The child names this thing some fanciful but, to him, significant name and plays with it for a long time. One child kept such a toy consisting simply of a roll of bits of chamois skin found in his mother's workbasket. This he named "The Disagreeable," and played with it for months.

No nurse is a good nurse who does not take good care of

her patients' thoughts, and, in order to do this, she will need the assistance of substantial material. For a considerable period of time training schools for nurses have taught rigorously the care of the body. Not too well has this been learned, but far too exclusively. The complaint of the general public in regard to trained nurses is not so much of a lack of knowledge of bathing, feeding, administering drugs and dressing wounds, but of the dearth of companionable qualities and mutual interests. A great multitude of invalids are clean, fed, dosed, dressed and miserable. These things all degenerate into mere routine duties while the real patient waits for true aid.

All victims of disease, either acute or chronic, suffer from a sense of a loss of time. They feel that they have been interrupted in their work. Even the child, whose work is play, feels this. Some accept this philosophically, others chafe constantly, still others are deeply depressed, while a fourth and, perhaps, most pitiable class seem to take a certain pride in their disability. All these mental attitudes aggravate existing conditions and retard recovery. The physician is conscious that his treatment is not fully effective because of the pulling down by various worries. Even the philosophic mind may result in too full an acceptance of conditions, and thus prove a veritable drag weight.

The problem of the nurse consists in minimizing these periods of complete disability and unproductiveness. She has to prove by actual test that a patient may be rendered physically unable to pursue one line of work and, by that very condition, may be placed in a position to develop his powers in another and heretofore undiscovered field. If a nurse can prove to the patient who chafes against his limitations that there is really a broad highway of usefulness opening before him of which he knew not, the mental friction is diminished and satisfaction steals in, while the whole physical organism prepares to respond by improved conditions.

In this connection the effect upon the nurse herself must not be overlooked. She too will forget the tiresome routine if new

ideas and methods are being worked out, but these must be mutually shared. Let the nurse assume the *rôle* of dictator and all grace is lost. She is then no companion but a task mistress. If, however, the proposition comes in the form of a gracious invitation to join her in a new interest, even though she may at first be compelled to carry the larger part of the work, as it goes on the patient's interest increases, and it soon becomes more and more his own. Take, for example, an irritable little child, unwilling to make any advance in happiness. Let the nurse, without discussion, sit down where the child's eyes must perforce fall upon her, and begin to fashion some trifle which a child loves. The patient passes from opposition to half interest, from this to inquiry, from inquiry to actual participation, and is thus surprised into happiness. The child's cry is often, "What can I do?" The answer consists in doing something *with* him rather than *for* him.

Realization of resources, initiation, participation—as an aid to the acquirement of these potent factors in the treatment of abnormal conditions the suggestions of this book are offered. Again and again will we find individual invalids who seem to defeat all attempts towards the establishment of normal interests, but the fault will usually be found to lie within ourselves. The great Goliath was slain by five smooth stones from the brook, but little David knew how to use them; should the giant Despair sit grimly down within our sick-room, his stay will be necessarily shortened provided we have learned how to use our stones.

LIST OF OCCUPATIONS

Afghan, Rake-work, 48
Animals, Cloth, 50, 133
  Cut Paper, 24
  Fruit and Vegetable, 46, 77
Apple-seed Mousetraps, 41

Baby's Handkerchief Cap, 136
Bags, Bean, 82
  Braid, 144
  Leather, 143
  Raffia, 54
Basketry, 91, 128, 147
Baskets, May, 41, 43
  Raffia, 92
  Strong, 128
Beads, Sealing Wax, 64
Beadwork, 91, 148
Bed-Desk, 48
Bed Puffs, 149
Belts, Tape, 61
Birch-bark Frames, 125
Bird, Flying, 35
Birthday Cake Board, 122
Blackberries, 90
Black Cat Balls, 56
Black Dinah Emeries, 86
Block Printing, 120
Blue Prints, 79
Bookbinding, 24, 112
Books, Scrap, 56
  Story, 24
Buckles, Sealing Wax, 63

Cake Board, Birthday, 122
Calendar Quilt, 97
Candle Penwiper, 56
Cards, Dinner, 69
Chair Caning, 145
Chair, Grandmother's, 99
Charcoal Drawing, 70
Charlotte Russe Cases, 57
Chatelaine Pinballs, 82
Chinese Junk, 31
Christmas Stockings, 60
Cloth Animals, 50, 133
Clothespin Dolls, 45
Coloring Photographs, 68
Cook Stove, Paper Box, 45
Cork and Pin Furniture, 46
Cottages, Paper Box, 44
Cozy, Egg, 101
Crocheted Dolls, 52
Cross-stitch Embroidery, 72
Cupboard, Paper-box, 45
Cut Out Pictures, 59

Designing Toilets, 71
Desk, Bed, 48
Dinner Cards, 69
Dishes, Eggshell, 45
  Leather, 45
Dolls, Clothespin, 45
  Crocheted, 52
  Nature, 45
  Nut, 52
  Rag, 52, 103
  String, 45
Dory, 27, 28
Drawing, 74
Dyeing, 66

Egg Cozy, 101
Eggshell Dishes, 45
Embroidery, Cross-stitch, 72
Emery, Black Dinah, 86
  Heart-shaped, 86
Envelope Sachets, 70
Eyeglass Cords, 127

Fans, Turkey Feather, 107
Fish Pinball, 87
Flowers, Ribbon, 88
Flying Bird, 35
Frames, Picture, 57, 125
Frieze, Cut Paper, 24, 59, 134
Frog, Japanese, 38
Fruit and Vegetable Animals, 46, 77
Furnishing, House, 26
Furniture, Cork and Pin, 46
  Paper-box, 44

Gardening, 110
Go-cart, 44
Gondola, 30
Grandmother's Chair, 99

Hammock, Doll's, 55
Heart-shaped Emery, 86
Holders, 100
House Furnishing, 26

House Planning, 109
Houses, Paper, 23
  Paper Box, 44
Hug-me-tight Jackets, 49

Illuminating, 69
Indian, Wishbone, 80

Jacket, Hug-me-tight, 49
Jack-o-Lantern, 80
Japanese Frog, 38
Junk, Chinese, 31

Kites, 80
Knitting, 96, 136, 141
  Rake, 48, 71
Knots, 115, 126

Lamb's-wool Cushions, 83
Lanterns, Paper, 41
Leather Dishes, 45
Leather Tooling, 71

McGinty, 100
Masks, Paper-bag, 64
Match Boxes, 88
Mats, Table, 66
May Baskets, 41
Mending, 128
Metal Work, 62
Miniature Fowls, 122
Moccasins, 130
Modeling, 139
Mousetraps, Apple-seed, 41

Nantucket Sink, 32
Nature Dolls, 45
Needlebooks, Roll-up, 105
  Shaker Bonnet, 84
Needlecase, Shamrock, 85
Netting, 148
Nut Dolls, 52

Painting, Charcoal, 70
  Pastel, 70, 134
  Water Color, 70
Paper-bag Masks, 64
  Box Furniture, 44
  Cut Animals, 24
  Cut Frieze, 24, 59, 134
  Folding, 27
  Houses, 23
  Lanterns, 41
Papier-Maché, 60
Patchwork, 97
Peas, Sweet, 89
Penwipers, Black Cat Balls, 56
  Candle, 56
  Flag, 106
  Turtle, 57
Photograph Coloring, 68
Picture Frames, 57, 125
  Puzzles, 130
  Stories, 24
Pictures, Cut Out, 59
Pinballs, Chatelaine, 82
  Fish, 87
Pincushions, Lamb's-wool, 83
  Roller Bandage, 83
Pins, Sealing Wax, 63
Plans, House, 109
Printing Block, 120
Prints, Blue, 79
Puffs, Bed, 149
Pyrography, 122

Quilt, Calendar, 97

Raffia Bags, 54
  Baskets, 91, 128, 147
Rag Dolls, 54, 103
Rake Knitting, 48, 71
Ribbon Flowers, 88
Roller Bandage Cushions, 83
Roll-up Needlebooks, 105
Roses, Ribbon, 89
Rugs, 106, 129, 146
Rush Bottoming, 145

Sachets, Envelope, 70
Sailboat, 29
Santa Claus, 79
Scrapbooks, 56
Sealing Wax, Beads, 64
  Buckles, 63
  Hatpins, 63
Sewing, 142
Shaker Bonnet Needlebook, 84
Shamrock Needlecase, 85
Signs, Street Car, 77
Sink, Nantucket, 32
Spatterflies, 78
Stencil, 65, 77
Stockings, Christmas, 60
Stories, Picture, 24
Stove, 45
Straw Braiding, 126
Street Car Signs, 77
String Doll, 45
Sweet Peas, Ribbon, 89

Table Mats, 66
Tape Belts, 61

Toilets, Designing, 71
Tooling, Leather, 71
Turkey Feather Fans, 107
Turtle Penwiper, 57

Vegetable Animals, 46, 77
Violets, Ribbon, 88

Watch Cords, 127
Water Color Painting, 70
Wax, Sealing, 63
Weaving, 53, 74, 143
Whittling, 125
Wishbone Indian, 80
Writing for the Blind, 141

The various addresses of supply places have been given in the text to facilitate the work of individual students. Doubtless many others of equal standing will be found in all large cities.

Y0-CIP-501